MINISTRY OF NATURAL RESOURCES

Simcoe District

LAND USE GUIDELINES

Ontario

Ministry of Natural Resources

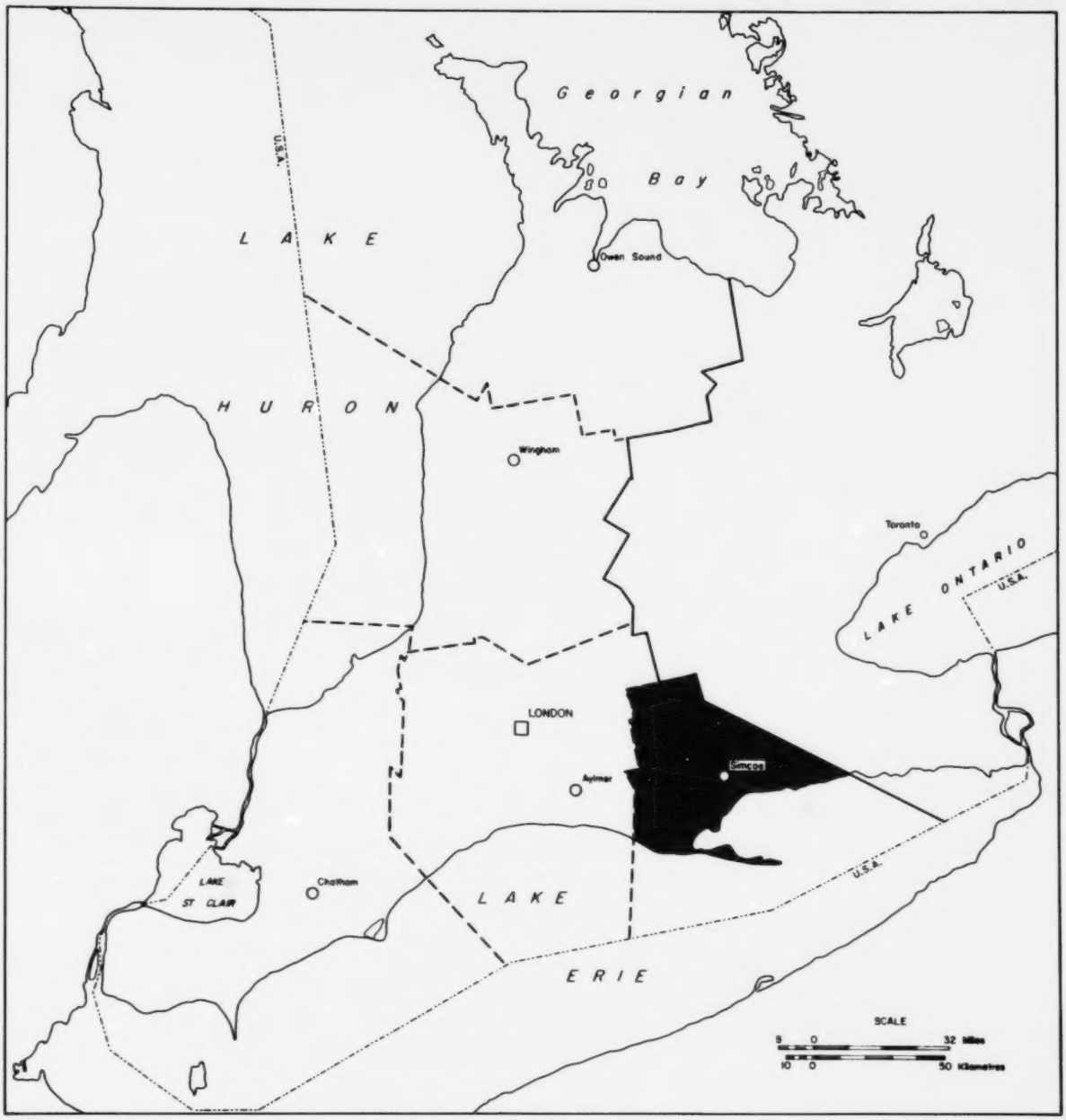
Hon. Alan W. Pope
Minister

W. T. Foster
Deputy Minister

1983

Figure 1

SIMCOE DISTRICT
SOUTHWESTERN REGION



Ministry of Natural Resources
Ontario

FOREWORD

The Ministry of Natural Resources has a primary responsibility for the management of the province's natural resources, in particular those related to resource development and outdoor recreation.

This document will serve as the overall design for integrated resource development in the Simcoe District. It is also intended to provide others with an understanding of the ministry's mandate and its programs which rely on both Crown and private lands for success.

To ensure an integrated approach the *Simcoe District Land Use Guidelines* identify where and in what manner the ministry may use Crown land, and to what extent it may wish to suggest uses of private land, in working towards the achievement of ministry objectives.

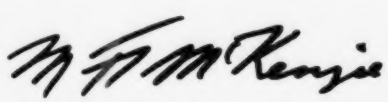
For Crown land the ministry must consider the land and water requirements for both its own programs and those of other government agencies. This will require ongoing liaison with these other agencies. The ministry will continue to consult with private landowners and local municipalities since the latter have the responsibility for control of private land use.

The program targets and approaches outlined in this document follow the overall direction outlined in the ministry's *Southern Ontario Co-ordinated Program Strategy.* This document may serve as one of the sources of information for ministry involvement in the planning process of municipalities and other agencies. It is recognized, however, that this document has no legal status.

Planning is a continuous process and must be responsive to changing needs, information and technology. Thus the targets and strategies presented in this document are subject to revision based on such factors as changes in government policy, new or refined resource information, and significant changes to land use in other planning documents. To accommodate changes the *Land Use Guidelines* will normally be reviewed every ten years and will involve full public consultation.

Comments may be addressed to the District Manager at any time.

Regional Director
Southwestern Region



District Manager
Simcoe District

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I INTRODUCTION

1. PROVINCIAL PERSPECTIVE

The goal of the Ministry of Natural Resources is to provide opportunities for outdoor recreation and resource development for the continuous social and economic benefits of the people of Ontario and to administer, protect and conserve public lands and waters.

To implement this goal, it is necessary for the ministry to identify the available resources and a future direction. The *Southern Ontario Co-ordinated Program Strategy* is the document which defines the natural resources and the necessary direction for this ministry.

In land and water management, the ministry has two responsibilities; to protect the capability and quality of public land and water; and, to participate with individuals, municipalities, conservation authorities and other agencies in the use and planning of the land base and available resources. This requires close co-operation to maximize ministry program achievement.

2. DISTRICT PERSPECTIVE

The Simcoe District is composed of the Township of Norwich (Oxford County), the Townships of Burford and Oakland (Brant County) and the majority of the Regional Municipality of Haldimand-Norfolk (formerly consisting of Norfolk and Haldimand Counties). The latter includes the Townships of Norfolk and Delhi, the Town of Simcoe, the City of Nanticoke and part of the Town of Haldimand.

The land base, of which only 2.3 percent is Crown, is subject to many demands of competing, conflicting or overlapping management objectives by private individuals and public agencies. To promote effective and co-ordinated resource management, the ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners. The ministry will continue to work with these groups, especially with municipalities through the ministry's plan input and review program to ensure that resource values are considered.

There will be instances when the ministry and others, for example another government agency, will have different intentions for the same area. When such situations are identified, the ministry will enter into negotiations to arrive at an acceptable solution. The way in which the ministry proposes to work with municipalities, conservation authorities and others to resolve differences is outlined in the application section of this report.

This document is intended to define the program objectives, targets and guidelines that Simcoe District plans to adopt in order to achieve its contribution to the targets in the *Co-ordinated Program Strategy*. These *Land Use Guidelines* identify what the ministry proposes to achieve locally.

More specifically, this report outlines:

- the targets which are achievable for each program;
- generally where these targets are to be achieved;
- methods for the implementation of these targets;
- how the ministry will work with conservation authorities, municipalities and individual landowners;
- how the ministry programs will be integrated; and
- a statement of program interests.

In these guidelines, targets have been developed for ministry programs to the year 2000 (2020 for forestry). These targets provide a basis for measuring the degree of achievement of ministry program objectives. It is not intended that all targets be achieved immediately, but mainly to

aim for target achievement over the next 20 years (40 years for forestry).

Target achievement may be affected by a number of factors in this time period, including:

- deficiencies in the original information and assumptions on which the targets were based;
- new or improved information or analysis which could result in changes in the original assumptions and conclusions;
- changes in economic and social conditions, whether at a local or provincial level; and
- provision by the Legislature of levels of staff and funds differing from those on which the targets are predicted.

Where changes in targets would appear to be desirable for these or any other reasons, this document will be amended accordingly. As a result, the *Land Use Guidelines* may best be viewed as a working paper which will be subject to considerable review and re-evaluation as the ministry proceeds with application.

3. PUBLIC CONSULTATION

Public consultation is fundamental and essential to the land use planning process. In southern Ontario, public involvement in ministry planning began with the development of the *Southern Ontario Co-ordinated Program Strategy.* Public consultation occurred in the preparation of the *Simcoe District Land Use Guidelines* with the holding of 'open houses' in June, 1982. At that time, the public was asked to comment on the accuracy of the ministry's information and to provide any additional knowledge they had of the planning area and raise any problems or issues they felt should be addressed during the process.

In July, 1982, a draft *Simcoe District Land Use Strategy* was released and in August additional open houses were held to explain the direction proposed in the *Strategy* and invite public comment. In addition to receiving many verbal and written comments as a result of the open houses, the ministry held follow-up meetings with municipalities and interest groups at their request.

Based on the analysis and evaluation of the public input received, this document was prepared. The Minister personally reviewed the district summary and analysis of public comment and discussed the proposed *Land Use Guidelines* with the District Manager.

Copies of comments received are available for viewing in the Simcoe District office, the ministry's main office public reading room and the Legislative Library at Queen's Park. Details of the public consultation program are found in an appendix to this report.

4. FORMAT OF THE GENERAL AND SPECIFIC POLICIES

The *Southern Ontario Co-ordinated Program Strategy,* provides the basis for the policies, targets, and guidelines in the *Simcoe District Land Use Guidelines.*

The *Co-ordinated Program Strategy* outlines ministry policies, program targets, and strategies necessary to achieve those policies and targets for southern Ontario. Policies and strategies only are provided for the four general areas of concern to the ministry: integrated resource management, public safety, environment, and energy. Policies, quantitative targets, strategies and integration concepts are provided for eight specific ministry programs: forestry, mineral aggregate, minerals and fossil fuels, fisheries, wildlife, provincial parks, general recreation, and land administration.

The *Land Use Guidelines* for Simcoe District is organized in a similar manner as follows:

a. Objective
A statement of policy for the area of concern or program in southern Ontario.

b. Target
A quantitative measure of resource production to be achieved for each program except for general program concerns. The targets represent future levels which will generally be achieved through transitional adjustments, improvements and efficiencies, and will not necessarily reflect output and allocation levels in the immediate future.

c. Discussion
Each program target has been evaluated in terms of the known capabilities and existing and anticipated use characteristics of the resource in the district. The information presented in the discussion section is intended to identify variances in present use, potential resource availability and the assigned program target.

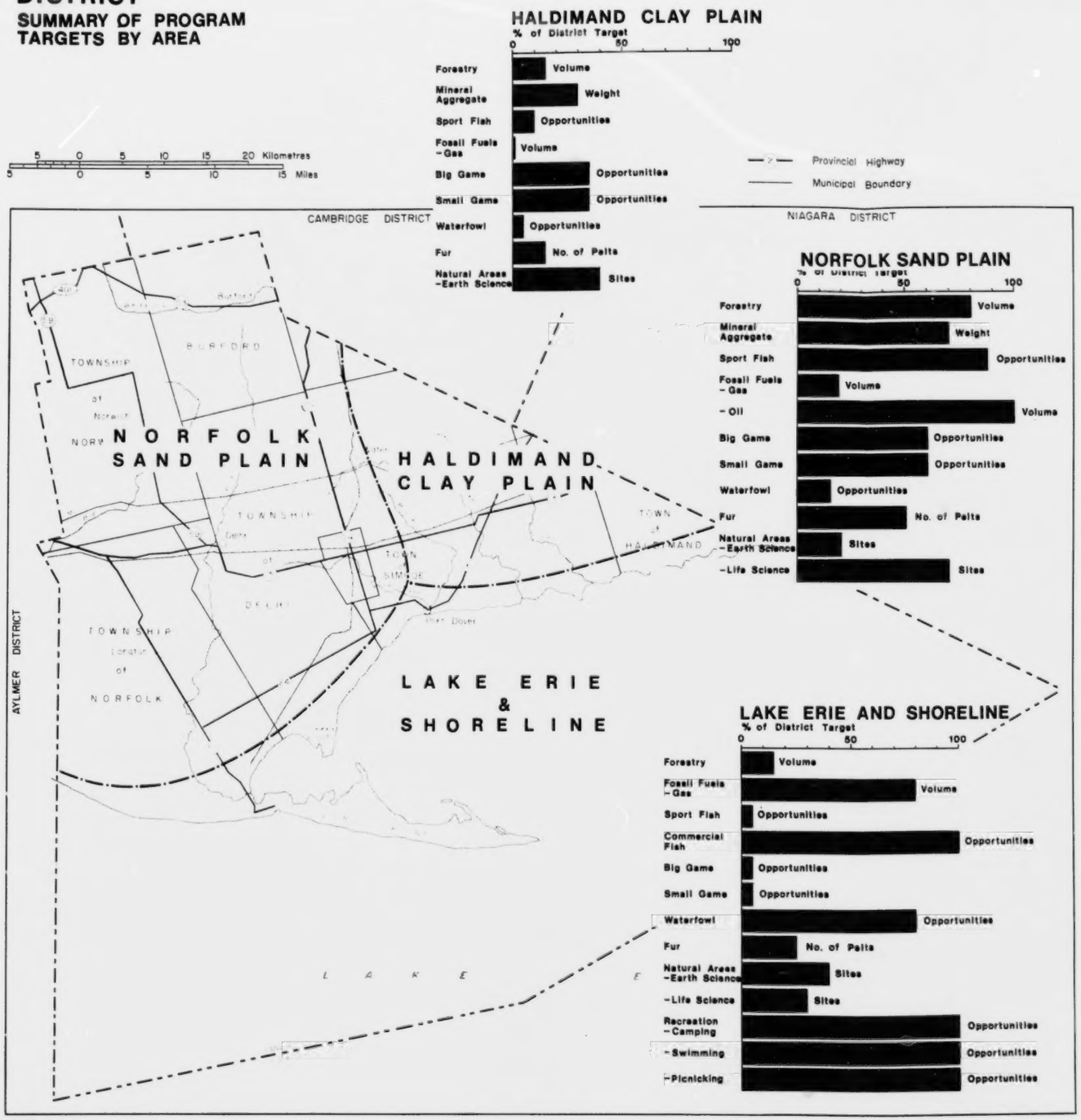
d. Strategy
This section outlines the strategy which Simcoe District intends to pursue in achievement of the district targets and where within the district, efforts will be concentrated.

e. Integration
A major aim of the *Land Use Guidelines* is an integrated approach to program target achieve-

SIMCOE DISTRICT

SUMMARY OF PROGRAM TARGETS BY AREA

Figure 2



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ment to ensure the efficient use of land and water (see Section II A). The information presented in the integration section highlights where and how a particular program can assist the achievement of other ministry program interests.

5. SUMMARY OF THE GUIDELINES

Figure 2 portrays the three main general resource areas used in the preparation of this report and illustrates the contribution of each to the program targets as a percentage in the histograms. The other two general resource areas, being the Lake Erie shoreline, considered together with Lake Erie in figure 2 and the urban/industrial areas, are highlighted on the General Resource Areas Map in the back pocket of this document.

Figure 3 summarizes the targets for Simcoe District. Present production, potential production and trend information is presented along with the percentage of target achievement both by sub-district planning area and land ownership class. Significant program areas necessary to meet the targets are also identified.

Figures 4 through 10 in Part III of this document show for each program the extent of the ministry's present involvement in the district's land and water base. The areas shown on these maps are those areas in which the ministry has significant resource interests and provide a starting point for implementation of the targets. The significant program concerns of Simcoe District are combined on the General Resource Areas Map in the back of this document. Each general resource area is identified by a character description and a management prescription emphasized.

FIGURE 3 SUMMARY OF TARGETS

Resource Target	Trend I = increase C = constant D = decrease		Resource Analysis		Resource Location			Ownership Percent			
			Present Use	Potential Available							
	Supply	Demand			Significant Program Area	Planning Area	% of District Total	Municipal	Conservation Authority	Private	Crown
Forestry 104,770 m^3/yr.	D	I	59,460 m^3/yr. (1979/80)	124,580 m^3/yr.	Production Forest: Upland Hardwood 47% Lowland Hardwood 41% Plantation 12%	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	80 15 5	2%	9%	84%	5%
Mineral Aggregate 26 Million tonnes (cumulative)	D	I	1.5 million tonnes (Average 1976-79)	Licenced Pits & Quarries 41.0 million tonnes High Potential Aggregate Areas 2019 million tonnes	Licenced Pits & Quarries High Potential Deposit Areas	Norfolk Sand Plain Haldimand Clay Plain	70 30	5%	—	95%	—
Minerals & Fossil Fuels	D	I	*Natural Gas* 293,519 x 10^3 m^3* *Oil* 3657 m^3* *calculation (1979)		*Natural Gas* Southern portion of the District including Lake Erie *Oil* existing field	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline Norfolk Sand Plain	19 1 80 100	Exploration and production of oil and gas occurs in all ownership classes. Natural gas production only permitted on Lake Erie. (100% Crown Land.)			
Fisheries Commercial 5.5 million kg.	D	I	6.6 million kg (1979)	5.5 million kg annual harvest	Long Point Bay	Lake Erie and Shoreline	100%				100%
Bait Fish 521,700 doz.	C	I	500,000 dozen (average)	521,700 dozen *see text	Long Point Bay Shoreline	Lake Erie and Shoreline	100%				100%
Sport 241,600 opportunities/yr.	D	I	161,000 opportunities (1980)	241,600 opportunities/yr.	Coldwater streams Warmwater streams	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	85% 10% 5%	1%	2%	96%	
					Ponds & Reservoirs	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	90% 10% 0%	1%	60%	25%	14%
					Long Point Bay (Inner Bay)	Lake Erie and Shoreline	100%				100%

FIGURE 3 SUMMARY OF TARGETS (continued)

Resource Target	Trend I = increase C = constant D = decrease		Resource Analysis		Resource Location			Ownership Percent			
	Supply	Demand	Present Use	Potential Available	Significant Program Area	Planning Area	% of District Total	Municipal	Conservation Authority	Private	Crown
Wildlife **Big Game (Deer)** 5,000 hunting opportunities/yr.	C	I	5,300 opport. (1980)	6,000 opportunities/yr.	Habitat: — mixed forests — open type	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	60 35 5	1%	1%	96%	2%
Small Game 67,050 hunting opportunities/yr.	C	I	46,300 opportunities (1980)	83,000 opportunities/yr.	wildlife habitat areas	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	60 35 5	1%	1%	96%	2%
Waterfowl 31,220 hunting opportunities/yr.	D	I	29,700 opportunities (1980)	46,500 opportunities/yr.	significant wetlands — Turkey Pt. — Long Pt. — Big Creek	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	15 5 80				
Furbearers 16,000 pelts/yr.	C	C	17,900 pelts (1980)	16,000 pelts/yr.	significant wildlife habitats — wetlands — uplands	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	50 15 35	1%	1%	96%	2%
Parks & Recreation **Camping** 308,500 opportunities	C	I	140,700 opportunities (1982)		Prov. Parks Long Point Turkey Point Selkirk	Lake Erie and Shoreline	100				100%
Picnicking 482,700 opportunities	C	I	354,700 opportunities (1982)			Lake Erie and Shoreline	100				100%
Swimming 1,459,600 opportunities	C	I	736,500 opportunities (1982)			Lake Erie and Shoreline	100				
Earth Science Features	C	C	0	5	Hemlock Cr. Sweets Cor. Shoup's Farm Quarry Sandusk Falls Walsh post Lake Warren Dunes	Norfolk Sand Plain Haldimand Clay Plain Lake Erie and Shoreline	20 40 40			100%	

FIGURE 3 SUMMARY OF TARGETS (continued)

Resource Target	Trend I = increase C = constant D = decrease		Resource Analysis		Resource Location			Ownership Percent			
			Present Use	Potential Available							
	Supply	Demand			Significant Program Area	Planning Area	% of District Total	Municipal	Conservation Authority	Private	Crown
Life Science Features	C	C	0	7	South Walshingham Sand Ridges Big Creek Floodplain Backus Woods Delhi Big Creek Floodplain Spooky Hollow Long Point Turkey Pt.	Norfolk Sand Plain Lake Erie and Shoreline	70 30	1%	7%	60%	32%
Historical Resources	C	C	6	incomplete assessment							

Direction for the ministry commitment to social and economic development and environmental protection is provided for in policies of general and specific nature. The general policies have application to all ministry program interests.

The specific policies provide direction to individual ministry programs of forestry, minerals, fisheries, wildlife, recreation and land administration and are directly related to the general policies of this section.

A: integrated resource management

1. POLICY STATEMENT

Programs will be integrated to ensure the efficient use of land and water to achieve ministry objectives.

2. STRATEGY

- ensure that each program contributes, to the extent possible, to the achievement of other program objectives
- apply the concept of multiple land use by:
  - promoting two or more compatible resource management objectives on the same land area, particularly public land
  - encourage sequential land use, (utilizing resources prior to development by incompatible uses)
- initiate single purpose resource management (protection of environmentally significant areas) or use (extraction) on a given land base only where appropriate and necessary
- combine district resource management activities as much as possible with other agencies and private landowners, particularly the local conservation authorities and area municipalities
- integrate the watershed planning program of the conservation authorities with the *Land Use Guidelines*
- permit interim use of future candidate parks providing park values are protected. Uses and facilities which complement the achievement of park objectives will be encouraged. Uses which have no significant negative impact on the long-term achievement of park objectives will be permitted with judicious controls; and uses which would conflict with the long-term achievement of park objectives will be prohibited.

B: public safety

1. POLICY STATEMENTS

The ministry will seek to eliminate loss of life and to minimize property damage and community disruption resulting from floods, erosion, earth slippage and forest fires.

The ministry will seek to eliminate injury and loss of life from hazards around abandoned pits and quarries and from abandoned oil and gas wells.

The ministry will promote the safe pursuit of outdoor recreation and resource production activities.

2. STRATEGY

Promote public safety by:

- public awareness of hazards (flooding, erosion);
- ensuring that new development avoids areas susceptible to flooding, erosion and earth slippage, or occurs only with adequate protection and safeguards. Such areas are:
  - stream floodplains, which include "floodways", defined as the area which would be flooded with an expected average frequency of once in 100 years, and "flood fringes", defined as the additional area which would be inundated by flood flows created under regional storm conditions. It is recognized that certain communities in Simcoe District have urban core components within floodways. Variation from provincial standards may be required to ensure continued community viability. The municipalities affected are to develop special policies for their stream floodways for the approval of the Minister of Natural Resources and the Minister of Municipal Affairs and Housing and the appropriate conservation authority;
  - shoreline areas which would be flooded with an expected average frequency of once in 100 years, including an allowance for wave uprush;
  - lands susceptible to erosion, which include stream banks and Lake Erie shorelands which are expected to erode over the next 100 years; and
  - lands prone to shifting, slumping and sinking due to soil type, condition and moisture content;
- participation in contingency planning, flood forecasting and provision of remedial works such as dams and channelization where development presently exists in hazard areas;
- participation in the mapping of floodplains and other hazardous areas;
- maintenance of an up-to-date flood emergency plan for the district;
- support of conservation authority efforts to encourage member municipalities to develop flood emergency plans;
- input to municipal plans and by-laws;
- encouragement of adequate safety measures at operating and abandoned pits and quarries through the mineral aggregate program;
- proper consideration of abandoned gas and oil wells during planning of new residential and other development proposals through the minerals and fossil fuels program;
- promotion of the hunter safety training program through the wildlife program;
- liaison with inspectors of the Ministry of Labour;
- maintenance of district facilities and lands in a safe condition; and
- implementation of a fire management plan for Crown lands and agreement forests. The preparation of a fire management plan will be prepared through the lands administration program. Assistance will be provided to local fire departments in dealing with forest fire suppression.

C: environment

1. POLICY STATEMENT

The ministry will conduct its activities in an environmentally responsible manner.

2. STRATEGY

- manage renewable resources on a biologically sound basis
- manage non-renewable resources to meet current demands, giving attention to anticipated future needs. Encourage recycling and discourage the use of high quality materials where lower quality materials would suffice
- in conjunction with conservation authorities, manage and regulate watersheds including ground water recharge and source areas, valley lands and waterfront areas
- encourage consideration of wetland values by other agencies. A wetlands policy will be issued in the near future
- identify and protect the habitat of provincially rare and endangered animals and plants
- participate in monitoring the effects of contaminants on natural resources
- in conjunction with the Ministry of Agriculture and Food, promote agricultural practices which minimize the impacts upon and help to conserve natural resources
- work closely with other government agencies to monitor the effect of contaminants, such as acid rain on natural resources and on the achievement of ministry objectives
- recognize areas of natural and scientific interest in the management and implementation of the ministry's various programs.

D: energy

1. POLICY STATEMENT

The ministry will undertake its activities so as to contribute to provincial energy objectives.

2. STRATEGY

To assist in meeting the provincial energy targets, Simcoe District will participate in a comprehensive energy action plan by:

- installing alternate heating systems at appropriate ministry facilities;
- promoting the increased use and acceptability of wood as an energy alternative as defined by the forestry program;
- ensuring that energy potential is considered before a permanent commitment is made to uses which exclude energy production through the minerals and fossil fuels program;
- supporting projects which use waste heat or other waste energy sources for resource management activities;
- assessing the energy potential of ministry and conservation authority water control; and
- encouraging exploration for mineral resources and fossil fuels which may supplement existing energy sources or provide alternative sources.

A: forestry

1. OBJECTIVE

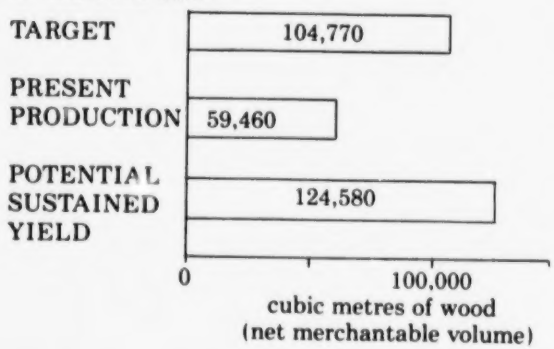
The objective for forestry in southern Ontario is to provide for an optimum contribution to the economy by forest-based industries consistent with sound environmental practices, and to provide for other uses of the forest.

2. TARGET

The targets for forestry in Simcoe District are:

- to produce an annual continuous supply of 104,770 cubic metres (3.7 million cubic feet) of wood for industrial purposes by the year 2020 while maintaining the present diversity of forest products; and
- to make the maximum contribution from forest production to the achievement of the provincial energy target. In southern Ontario this is estimated to be 2 percent or more of total energy needs by the year 2000.

3. DISCUSSION



Examination of available data indicates Simcoe District has approximately 28,340 hectares (70,000 acres) of productive forest composed of upland hardwoods (47 percent), lowland hardwoods (41 percent) and conifer plantations (12 percent). This figure, based upon 1958 Forest Resource Inventory (F.R.I.) data, excludes non-productive and protection forest and incorporates an allowance for loss of productive forest to other uses (for example, residential and agriculture). The loss of productive forest since 1958 is considered to be about 15 percent and is thought to be continuing at a rate of about 200 hectares (500 acres) per year.

To meet the assigned target, Simcoe District will continue management operations upon present productive forest land of which the majority (84 percent) is in private ownership. The ability of productive forest land to sustain the target level of production and maintain a diverse supply assumes a reasonable level of intensive management and minimal further reduction in productive forest area. Presently, 27 percent of the total productive forest is under active management. Management operations for industrial wood production will also contribute secondarily to the energy target. At this time though, projections of demand for wood as a source of energy are difficult to accurately define.

While the figures presented for forest resource production are an expression of volume, consideration must be given to the nature and quality of products from the Great Lakes St. Lawrence Forest Region and the Carolinian Forest Region. The hardwood species (oak, maple, ash, walnut) of these regions provide high quality and valuable products which contribute to the economy in the form of veneer, furniture and lumber.

The present productive forest area is capable of meeting the assigned forestry target. Major regeneration is not required to meet this target. However, forested land contributes additional benefits to the resource base of this district. Forested areas function as effective windbreaks, erosion control barriers, watertable regulators and wildlife habitats to name a few. Therefore, reforestation of idle lands, valley slopes and non-productive agricultural lands to forest cover should continue. In this regard, conifer plantation management provides softwood production and other benefits in the short-term and contributes in the long-term to the natural establishment of native hardwood species.

Continued maintenance and effective management of forested areas and reforestation of

appropriate lands will ensure that Simcoe District is capable of meeting the target and provide for future increases in demand above the presently assigned target. At the same time, this management direction will optimize resource program integration.

4. STRATEGY

- improve forest production on existing private woodlots (particularly high quality woodlots) by:
  - promoting the establishment and maintenance of forests through agreements under the *Woodlands Improvement Act* and the *Forestry Act*; and
  - making extension services available, particularly thinning and marking operations, to promote productive growth and proper harvesting.
- selectively increase forest production on Crown and private lands by:
  - promoting planting on marginal and idle agricultural lands;
  - identifying Crown land suitable for planting; and
  - promoting the continued quality of existing productive woodlots.
- discourage the clearing of existing productive forest areas for other uses.
- encourage reforestation on hazard land.

5. INTEGRATION

- manage to accommodate other uses of the forest, for example, to maintain and improve wildlife habitat and provide opportunities for low intensity recreation and scenic enjoyment
- in co-operation with the mineral aggregate interest, reforestation will be promoted on lands depleted of aggregate resources
- timber harvest will be promoted prior to commencement of mineral aggregate extraction
- along watercourses and in headwater/source areas, forest management will promote fisheries and wildlife habitat and their future management
- forest planting or management in significant earth and life science feature areas will be conducted in a manner compatible with the features in question.

B: mineral aggregate

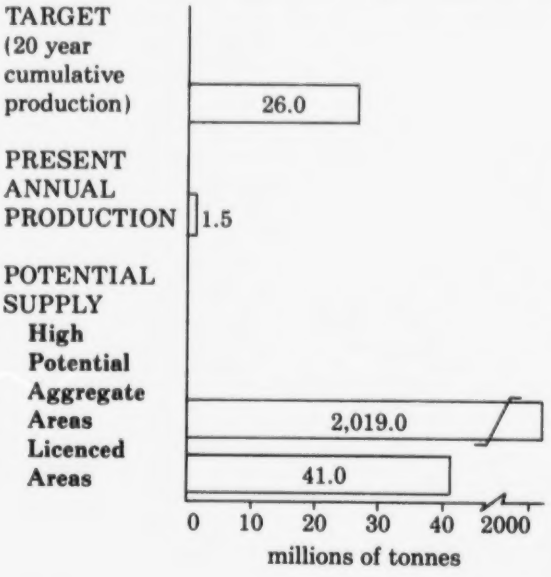
1. OBJECTIVE

The objective for mineral aggregate production in southern Ontario is to meet anticipated future demand with minimal disturbance to natural and cultural resources and the social environment.

2. TARGET

The target for mineral aggregate production in Simcoe District is to ensure a total cumulative supply of 26 million tonnes for the period 1982 to 2000.

3. DISCUSSION



SIMCOE DISTRICT
FOREST RESOURCES PROGRAM

Figure 4

LEGEND

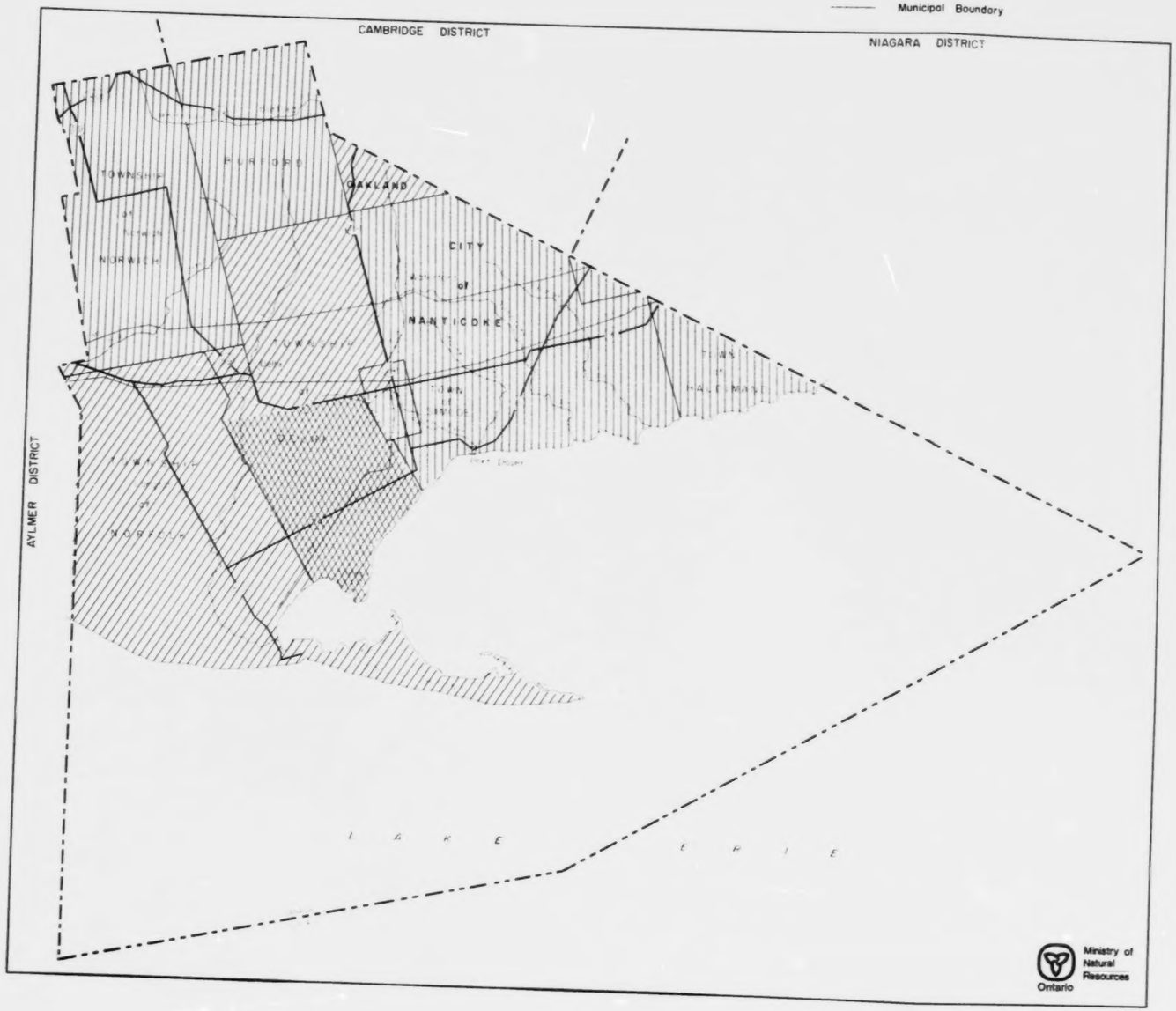
Forest Cover 0 – 10 %
" " 10 – 20 %
" " > 20 %

WIA's	By Area	Municipality	
Haldimand	26	Norwich	65
Nanticoke	106	Norfolk	161
Oakland	4	Delhi	103
Burford	33		

5 0 5 10 15 20 Kilometres
5 0 5 10 15 Miles

N

Provincial Highway
Municipal Boundary



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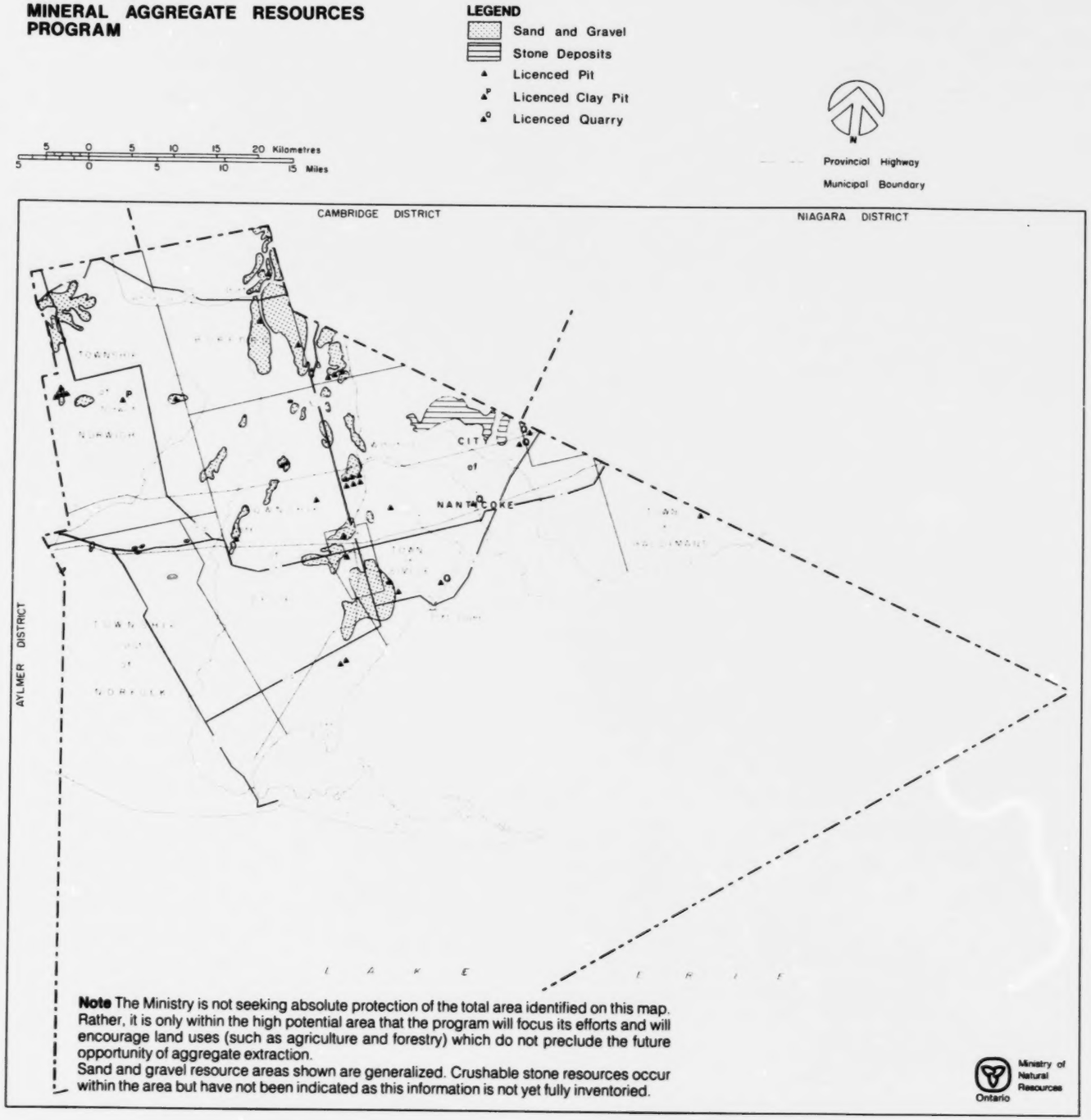
SIMCOE DISTRICT

MINERAL AGGREGATE RESOURCES PROGRAM

Figure 5



Note The Ministry is not seeking absolute protection of the total area identified on this map. Rather, it is only within the high potential area that the program will focus its efforts and will encourage land uses (such as agriculture and forestry) which do not preclude the future opportunity of aggregate extraction.
Sand and gravel resource areas shown are generalized. Crushable stone resources occur within the area but have not been indicated as this information is not yet fully inventoried.

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Aggregate production in Simcoe District is obtained from 30 licenced sand and gravel pits and 4 licenced stone quarries. Total production in 1980 was 1.5 million tonnes consisting of 1.0 million tonnes from sand and gravel deposits and 0.5 million tonnes from stone deposits for use primarily in construction. Approximately 2000 tonnes of clay were utilized yearly in the manufacture of drain tiles for agricultural use.

Presently licenced areas have available an estimated potential of 41.0 million tonnes of aggregate. This consists of 17.0 million tonnes of sand and gravel and 24.0 million tonnes of crushable stone. Calculation of this potential aggregate supply assumed:

- the aggregate is uniform in depth;
- the quality of aggregate is uniform;
- extraction is economical;
- demand will require the quality of aggregate available; and
- presently extracted aggregate grades will remain proportional in the potential supply.

Based upon these projections, it is possible to meet the assigned cumulative supply target of 26.0 million tonnes. This suggests that no additional areas require protection. However, the ministry cannot guarantee continued use or level of production in the free market.

While present licenced aggregate areas are capable of achieving the target, this approach fails to recognize mineral aggregate as a finite, non-renewable resource and continuing demand after the year 2000. As a means of providing for the future, it is often necessary to maintain the resource potential of more aggregate than the target would suggest.

This ministry is not promoting land designation for aggregate extraction, but rather, it is seeking designations such as agriculture and forestry as opposed to residential and industrial. Such designations provide for ongoing uses without severely restricting or closing the door on future options of mineral aggregate removal. In other words, the ministry is encouraging the local municipalities *to identify and maintain* the potential of aggregate reserves.

Rehabilitation of depleted aggregate reserve areas is a requirement of existing licenced pits and quarries. Depending upon municipal priorities, the land can be returned to almost any use such as agriculture, recreation, forestry, housing, commercial or industrial.

High potential aggregate reserve areas have been identified in this strategy and consist of 1239 million tonnes of sand and gravel and 780 million tonnes of stone. Areas presently designated for concentrated urban development have been excluded from the high potential aggregate reserve category. Moderate and low potential aggregate reserve areas have also not been identified due principally to the economic constraints of development and their extensive geographic distribution within the district.

4. STRATEGY

- ensure that all licenced pits and quarries are identified and recognized in municipal planning documents
- ensure that aggregate operations are carried out in a manner which will minimize disturbance to the natural, cultural and social elements of the environment.

In seeking to maintain the resource potential of aggregate areas for future use, Simcoe District plans to:

- work jointly with local municipal governments to identify and protect high potential aggregate areas from incompatible uses.

5. INTEGRATION

- prior to approval of new pits and quarries, mineral resources staff will consider all other ministry programs
- extraction area rehabilitation plans will be compatible with adjacent land uses and will incorporate the interests of other programs where feasible
- every effort will be made to ensure that aggregate extraction activities have no detrimental effect on the quality and integrity of significant earth and life science feature areas.

C: minerals and fossil fuels

1. OBJECTIVE

The objective for minerals and fossil fuels in southern Ontario is to provide for a strengthening of the contribution of these resources to provincial economic development and energy production.

2. TARGET

The target for mineral resources in Simcoe District is to keep as much land open as possible for mineral exploration and development.

The target for oil and gas is to encourage as much exploration and production as possible to maximize their contribution to provincial energy needs.

No specific target can be allocated since the resources have not been inventoried, the potential has not been fully explored, market trends are difficult to predict, and actual production is primarily the responsibility of the private sector.

3. DISCUSSION

The limited amount of Crown land (2.3 percent) which exists in Simcoe District will be kept open for mineral exploration and development and will not be committed to other uses until their potentials have been evaluated. On private lands, deposits of clay, gypsum, marl, lead, zinc and peat have been identified. Continued evaluation of these resources will occur and their development will be promoted where feasible.

For petroleum resources, as much land as possible for exploration and development will be kept open. By keeping as much land open as possible for exploration and development, an increase in Ontario's contribution to its petroleum needs should be realized.

During 1978, Ontario produced less than 0.1 percent of the provincial consumption of oil and about 0.2 percent of the natural gas consumed.

No specific percentage increases of oil and gas production can be established at this time since many areas are unexplored and potential reserves unknown.

In Simcoe District, the primary gas-bearing rock unit is the Clinton-Cataract. In 1980, 14 active natural gas fields were identified both onshore and offshore under Lake Erie. Production totalled 293,519 m^3 (10.4 M Mcf) with a dollar value of approximately 25 million. Oil production totalled 3,819 m^3 (24,170 barrels) from two active fields for a dollar value of 0.5 million.

4. STRATEGY

- keep open as much land as possible for mineral and petroleum resource exploration
- identify known reserves and production areas for minerals and fossil fuels
- recognize the existing International Agreements on oil and gas extraction in the Great Lakes. Future production from Lake Erie will require consideration of the impacts on the environment.

5. INTEGRATION

- exploration and development activities will consider the objectives of other ministry programs
- exploration and development operations proposed in significant program areas (for example, coldwater stream areas, wetlands, forests, etc.) will be reviewed carefully to assess potential impacts. Utilization of methods to minimize negative impacts will be promoted
- in principal commercial fishing areas, methods and equipment will be deployed which assist the interest of both the fishing and oil and gas industry.

SIMCOE DISTRICT
FOSSIL FUELS PROGRAM

Figure 6

D: fisheries

1. OBJECTIVE

The objective for fisheries management in southern Ontario is to provide opportunities for recreation and economic benefits consistent with the maintenance of healthy fish communities.

More specific objectives are:

Sport Fishing

- to meet the demand within the limits of a wisely managed and rehabilitated resource;

Commercial Fishing

- to maintain a viable industry;

Bait Fishing

- to maintain current production; and

Provincially Rare and Endangered Species

- to prevent the extinction of any native species.

2. TARGETS

The targets for fisheries management in Simcoe District are:

Sports Fishing

- to provide 241,600 recreation opportunities by the year 2000. This will require the production of 167,900 kilograms (370,200 pounds) of fish annually;

Commercial Fishing

- to provide 5.5 million kilograms (12.1 million pounds) of fish annually by the year 2000;

Bait Fishing

- to provide 521,700 dozen fish annually from natural sources. This production is in addition to the commercial fishing target; and

Provincially Rare and Endangered Species

- to ensure no native fish species become extinct.

3. DISCUSSION

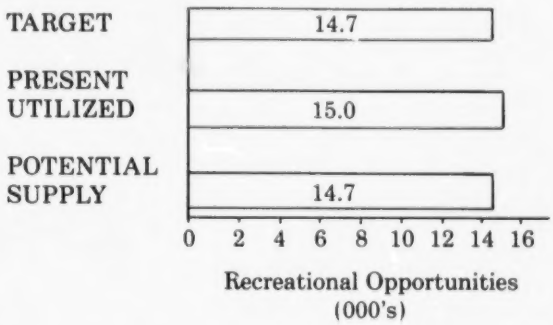
a. Sport Fishing

Since the *Co-ordinated Program Strategy* was prepared, refined data and improved predictive modelling have resulted in revision of the assigned targets for sport fishing opportunities. Further changes may result in the future, as more information and understanding of the resource is developed and management guidelines are refined in conjunction with neighbouring American jurisdictions.

For the purpose of discussing Simcoe District's sport fishing target, the target has been divided into three components: the opportunities to be provided from streams, from ponds and reservoirs, and from Long Point Bay and Lake Erie. Of the total target of 241,600 sports fishing opportunities, it is planned that each of these components will provide:

- 14,700 recreation opportunities by the year 2000 on all streams;
- 31,200 recreation opportunities by the year 2000 on all ponds and reservoirs;
- 195,700 recreation opportunities by the year 2000 on the waters of Long Point Bay and Lake Erie.

(i) Inland Streams



Present recreational fishing preference is to the 75 cold water streams of Simcoe District. These streams and 70 cool water streams, capable of supporting cold water fish species, experience pressures of:

- degraded habitat (water temperature increases and siltation, contamination, etc.);
- conflicting land uses;
- irrigation requirements;
- artificial blockages (dams); and
- improper land management (forest clearing, cattle access, etc.).

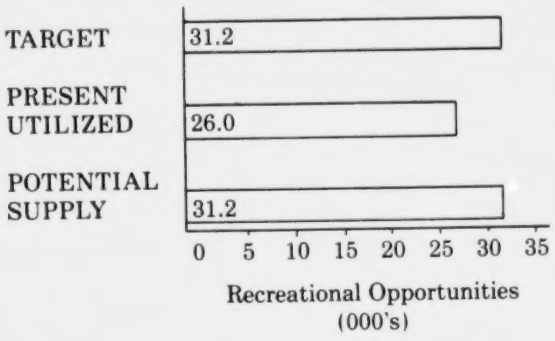
Maintenance of the target of 14,700 recreation opportunities on all streams assumes that these pressures will not increase. In addition, it assumes

that access to these streams can be improved.

The target for inland stream fishing also recognizes the preference to cold water species fishing. The potential supply figure does not include anadromous (migrating) species. These species, while fished for on streams, are considered as part of the sport fish potential of Lake Erie. Present inland stream recreational fishing pressure is exceeding the capacity of the streams to produce.

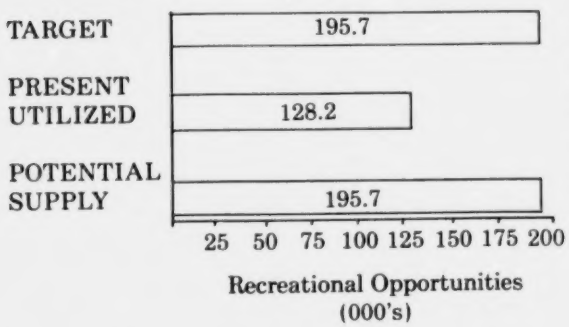
In Simcoe District, fisheries programs will be based upon fish community management. To continue fishing opportunities at present levels and ensure natural fish communities are self-sustaining, fisheries management effort will be directed primarily towards protection and maintenance of cold water streams, and where necessary, rehabilitation.

(ii) Ponds and Reservoirs



While considered secondary to sport fishing on streams, the self-sustaining (warm water) and put-and-take (cold water) ponds and reservoirs of Simcoe District are a major component of sport fishing target achievement. The majority of available ponds and reservoirs in Simcoe District is owned by the Long Point Region Conservation Authority, and their support for fisheries management is essential to target achievement.

(iii) Lake Erie



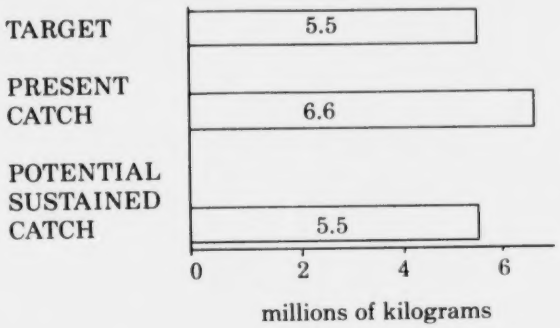
Sports fishing on Lake Erie in Simcoe District principally occurs in Long Point Bay. The species taken by sports fishermen are mainly smallmouth bass and yellow perch. Yellow perch also are taken by commercial fishermen.

For Lake Erie sport fishing, it is anticipated that demand will continue to increase. To ensure target achievement and to minimize conflicts for available supply, it is necessary that:

- angler access to fishing be maintained;
- spawning areas are not degraded and remain accessible to preferred species;
- water quality remain acceptable; and
- rehabilitation of both habitat and species composition succeed.

Presently, American states on Lake Erie are stocking salmon which provide recreational opportunities to Ontario fishermen. These *exotic* species opportunities are not included in the district target because the ministry lake management is based upon a policy of rehabilitation of self-generating stocks of indigenous (native) species.

b. Commercial Fishing



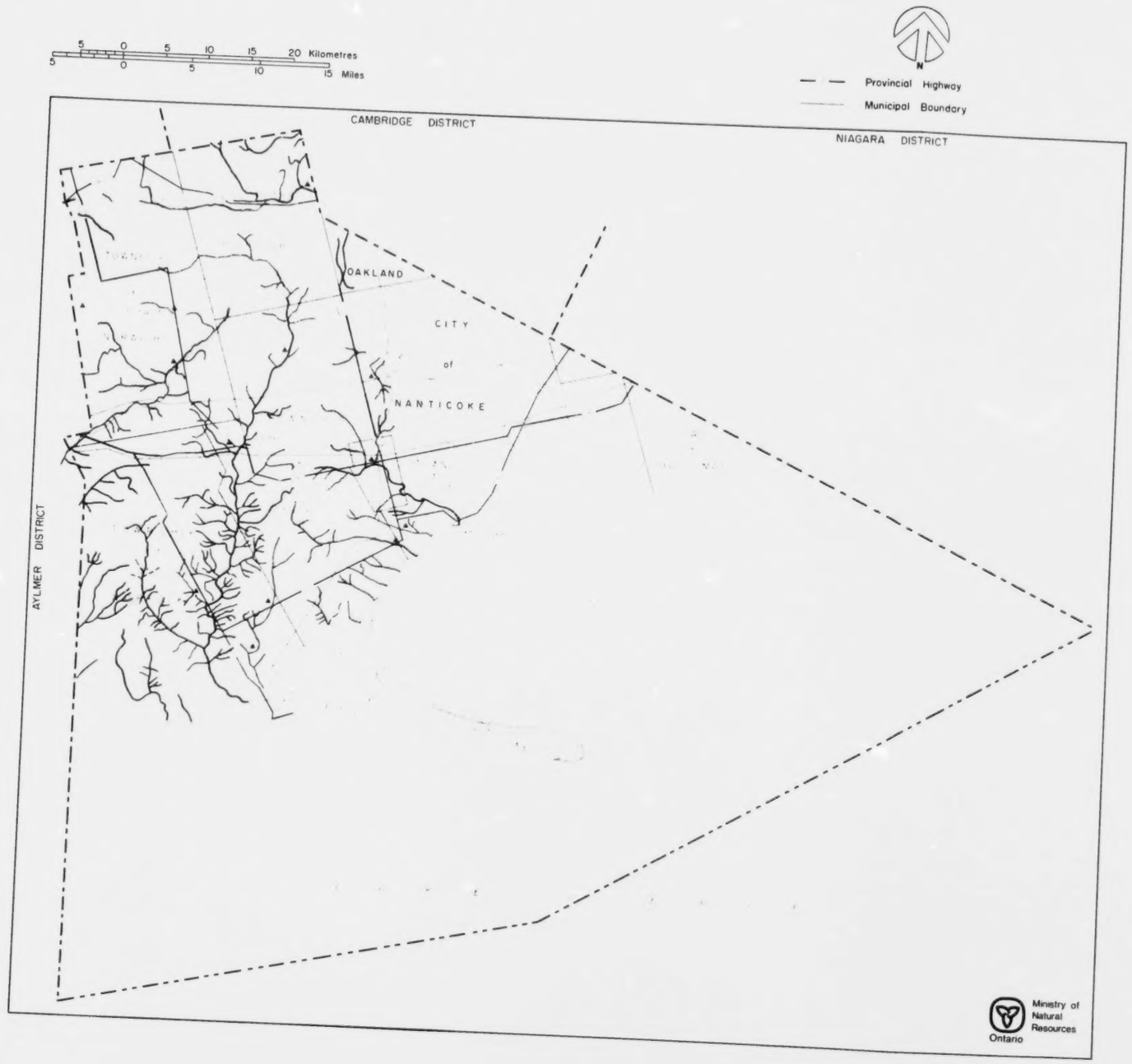
Port Dover is the home port for approximately 40 commercial fishing tugs which operate in the eastern basin of Lake Erie. In 1981, these commercial fishing operations reported landings of approximately 6.4 million kilograms of smelt, 90,900 kilograms of perch, and 90,000 kilograms of mixed species fish.

Commercial gill-net operations are restricted within Inner Long Point Bay (see Figure 8). Within this zone, a small commercial impoundment and seining operation concentrates primarily upon spring and fall harvest of coarse and pan fish. This fishery employs approximately 30 men and harvests between 68,000 and 181,000 kilograms of fish yearly.

The past performance of the fisheries of Lake Erie have been reviewed and the reported harvest levels are being used to determine the mean annual allowable yield of those species that are important to the commercial fishery.

SIMCOE DISTRICT
SPORT FISHING PROGRAM

Figure 7



SIMCOE DISTRICT
COMMERCIAL FISHING PROGRAM

LEGEND

- Prime Trawling Zone
- Bait Fish
- Gillnet Zone
- Hoop & Seine
- Hoop Only

5 0 5 10 15 20 Kilometres
5 0 5 10 15 Miles

Figure 8

N
Provincial Highway
Municipal Boundary
NIAGARA DISTRICT
Ontario
Ministry of Natural Resources

Smelt fishing is the mainstay of commercial fishing within Simcoe District. Seventy-four percent of the smelt harvested from Lake Erie (1961 to 1980) were taken within the district. Current estimates of the allowable harvest of smelt from Lake Erie indicate that, on a sustained yield basis, approximately 6.8 million kilograms will be available annually to the commercial fishery. Based on the historical harvest pattern, the Simcoe District commercial fishery target for the year 2000 is estimated at 5.0 million kilograms of smelt.

Perch constitute a relatively small portion of the total harvest of commercial fish within Simcoe District, but the greater market value of perch, compared to smelt, means perch are of considerable economic importance to the district fishery. It has been estimated from a review of historical harvest patterns that the safe level of harvest of perch from Lake Erie is approximately 4.5 million kilograms per annum. Commercial fishermen have traditionally taken from waters in Simcoe District approximately 3.5 percent of the total lake harvest, assuming this pattern continues the target is to harvest 160,000 kilograms of perch by the year 2000.

Other species such as freshwater drum, alewives and carp, have in the past, comprised only a minor portion of the commercial harvest within Simcoe District. The harvest level of these species does not necessarily reflect abundance but rather the low commercial value of the fish. White bass, although a valuable fish, are abundant in Simcoe District waters at irregular and unpredictable intervals. Due to this, they have been a target species only in periods of abundance.

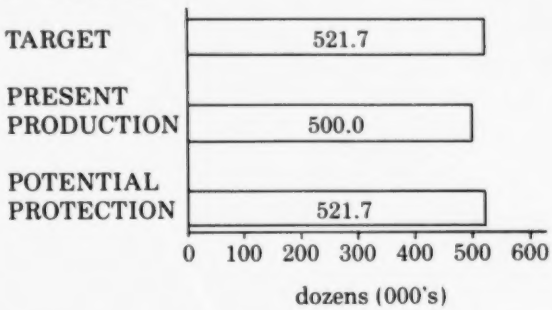
(i) Great Lakes Management The Great Lakes and interconnecting waters, except Lake Michigan, are resources shared by the United States and Canada. Various agreements between the two countries covering the use of these waterbodies have been ratified over the years, but the most important document directly related to fisheries management is the *Convention on Great Lakes Fisheries* (1955). This convention established the *Great Lakes Fisheries Commission* and set forth its duties. Two major responsibilities of the Commission have been: (1) developing co-ordinated research and management programs with the findings used to recommend measures which would permit the maximum sustained productivity of fish stocks of common concern; and (2) formulating and implementing a program to eradicate or minimize sea lamprey populations.

The role of the Commission expanded on June 17, 1981 with the formal adoption by Canada and the United States of the *Joint Strategic Plan for the Management of Great Lakes Fisheries.* Fisheries management plans for each lake will be formulated as a result of this new agreement. The initial responsibility for plan formulation will rest with the individual lake committees of the Commission. Ontario is officially represented on each lake committee by the Chairman of the corresponding Ministry of Natural Resources Fisheries Management Committee for the Ontario portion of that lake.

Each ministry fisheries management committee is chaired by a ministry deputy regional director, with members representing administrative regions and districts, fisheries assessment units, fisheries research stations, and the ministry's main office. The purpose of these lake committees is to ensure the unity of all fisheries activities by:

- co-ordinating regional and district management efforts to achieve targets;
- directing assessment unit programs;
- recommending research priorities; and
- recommending policies, targets and legislation.

c. Bait Fish



Yields of bait fish in Simcoe District have fluctuated between 533,000 dozen and 350,000 dozen. The target of 521,700 dozen is an estimate of the total potential bait fish available for harvest. This figure is composed of 489,000 dozen from the waters of Lake Erie and 32,700 dozen from inland water sources.

Bait fish harvest is concentrated in the shallow waters of Lake Erie due to accessibility. Very little if any harvesting occurs on streams mainly due to access problems and degraded habitat conditions. The present production of 500,000 dozen bait fish, principally from Lake Erie waters, is above the sustained yield potential of the population.

4. STRATEGY

a. General

The principal aim of fisheries management is to

restore a balanced fish population which can support both an active sport and commercial fishery from naturally reproducing stocks. This direction will require that existing stocks and habitats be maintained, rehabilitation of degraded stocks and habitats be undertaken and necessary controls be placed upon the resource users to ensure harvests are in line with sustainable yields.

The allocation of available sustained yield among user groups will be based on an objective, careful examination of all relevant biological, social and economic factors to ensure that the optimum benefits accrue to the residents of Ontario. It is the responsibility of both anglers and commercial fishermen to participate in co-operative management and adhere to their catch limits, quotas and the regulations to protect the fish stocks and guarantee their perpetuation for the future.

Simcoe District will achieve its targets by working through the Lake Erie Fisheries Management Committee to devise a harvest system that will maintain harvest levels that are biologically sound. More accurate data and more refined analysis techniques will be sought to improve our capability to predict levels of abundance of various fish species.

b. Sport Fishing

- protect and improve fisheries habitat
- maintain and improve public access to fishing waters
- encourage access to fishing waters on private lands
- protect and where necessary, rehabilitate cold water streams as a fisheries priority.

c. Commercial Fishing

- promote good land use practices to lessen erosion and sedimentation
- protect critical fish habitats.

d. Bait Fish

- ensure harvest levels are compatible with biological productivity
- encourage production from capable inland streams.

e. Rare and Endangered Species

- in rehabilitation of fisheries communities, emphasize native species
- identify and provide appropriate protection to threatened species.

5. INTEGRATION

- fishery management plans will be developed and implemented within the framework of the provincial fishery enhancement program
- fishery management on Lake Erie will be developed and undertaken with the support of existing fishery research and assessment units
- fishery management plans will consider other ministry programs. In particular, where:
  - fishery and wildlife interests overlap
  - development of fish habitat and provision of recreational opportunities as part of pit and quarry rehabilitation schemes. Consultation will be with the mineral resources program
  - fishery management in provincial parks or significant earth and life science feature areas will conform to approved master plans and interim management plans
- work with conservation authorities in managing fisheries resources.

The fisheries management committee for each Great Lake is responsible for ensuring that the fisheries management of each district is integrated with those of other districts and conform with lake-wide strategies. Simcoe District's Lake Erie fisheries management will be integrated with those of other districts through the Lake Erie Fisheries Management Committee.

E: wildlife

1. OBJECTIVE

The objective for wildlife management in southern Ontario is to provide opportunities for social and economic benefits from wildlife recreation and fur harvest consistent with the maintenance of healthy wildlife populations.

More specific objectives are:

Hunting

- to provide opportunities sufficient to maintain the present rate of participation and quality of hunting by residents; and
- to maintain the contribution to the economy of hunting by non-residents.

Trapping

- to sustain the maximum yield from wild furbearer populations while maintaining the present diversity of fur types.

Other Uses

- to prevent additional species from becoming endangered or threatened;
- to improve the status of existing endangered or threatened species with the objective of removing them from the endangered species list;
- to maintain populations of all wildlife species (both non-game and game) at levels sufficient to:
  - provide opportunities for recreational enjoyment, aesthetic appreciation, scientific investigation and educational uses;
  - provide benefits from tourism;
  - ensure environmental quality and ecosystem integrity; and
  - ensure the safety of the public.

2. TARGET

The targets for wildlife management in Simcoe District are:

Hunting

To provide by the year 2000, 103,270 opportunities of hunting recreation per annum, including:

- 5,000 opportunities of deer hunting;
- 67,050 opportunities of small game hunting; and
- 31,220 opportunities of waterfowl hunting.

Trapping

To manage populations of wild furbearers such that an average harvest of 16,000 pelts can be achieved by the year 2000 while maintaining present species diversity.

Other Uses

A target for wildlife viewing has not been included due to the difficulty of measuring this activity and of assessing the influence of management actions.

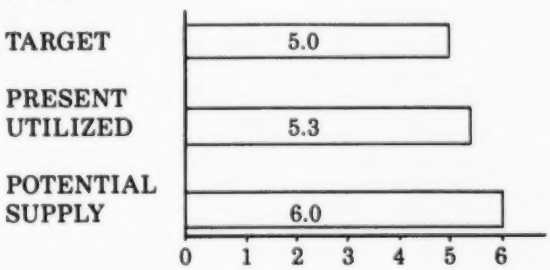
Viewing targets will be defined through ongoing policy development and will be incorporated into the *Land Use Guidelines* at an appropriate opportunity.

The target for rare, threatened or endangered species is to ensure no wildlife species become extinct.

3. DISCUSSION

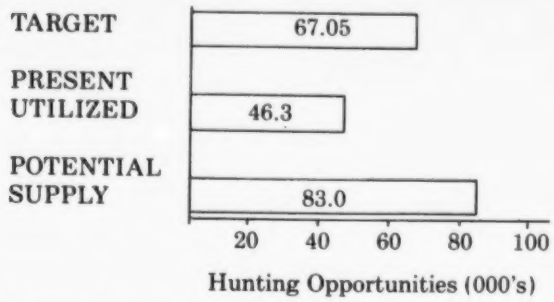
a. Hunting

(i) Deer



The number of deer in Simcoe District is not precisely known at present. In 1980, 135 deer were harvested by shotgun and muzzleloader and 32 by archers for a total of 167 deer. Access by hunters to privately owned land is the critical factor determining the number of recreational opportunities available. The target is below the potential of the population for this reason. Harvest of deer will be maintained at biologically acceptable levels. Hunting access will depend on landowner attitudes.

(ii) Small Game

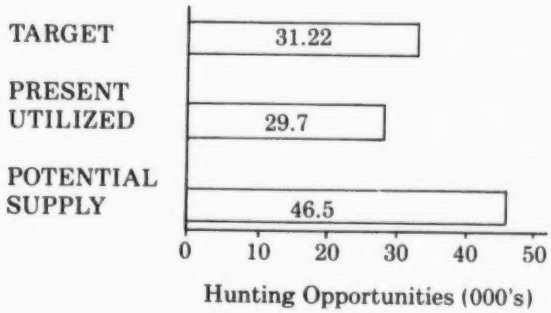


Simcoe District supports a diversity of wildlife species. The transition zone between forest and intensive agriculture provides ideal conditions for wildlife. Geographically, habitat varies from the open type of the Haldimand clay plain to the mixed forest type of the Norfolk sand plain.

A decrease in hunter success has been observed and is reflected in the assigned target being less than the potential. This declining level of harvest is the result of a number of factors including:

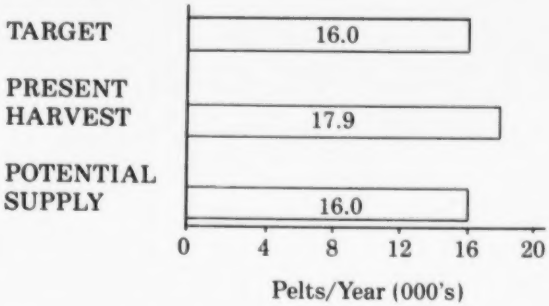
- loss of critical habitat (fencerow removal, land clearing, wetland alteration);
- decline of preferred species (for example, pheasant); and
- decline in the availability of the land base for hunting (loss of access, municipal restriction).

(iii) Waterfowl



Waterfowl hunting in Simcoe District is directed principally towards a migratory population which relied heavily upon the marshes of Long Point, Turkey Point and Big Creek. While the majority of factors influencing waterfowl populations are external to Simcoe District, target achievement is possible by maintenance and improvement of critical wetlands. Loss of or disturbance to significant resting and staging areas would severely handicap the ability of Simcoe District to attract waterfowl and would jeopardize target achievement.

b. Trapping



The target for pelt production from furbearers is based upon the average number of pelts taken over a period of years. This average level of harvest is considered to be the maximum sustained yield of the population and is presently realistic and achievable.

The level of fur harvest will be limited by:

- loss of habitat;
- cyclical population levels;
- loss of trapping access to private land;
- natural population catastrophe;
- depressed pelt prices;
- uneven trapping pressure geographically; and
- public opposition.

These factors require that the target be viewed as a long-term average and not as a precise annual yield.

To sustain the target, Simcoe District will have to direct management effort towards protecting critical habitat components, maintaining trapping right of access and ensuring populations are not being over harvested.

c. Other Uses

The occurrence of rare and endangered species in Simcoe District will be identified and monitored and appropriate measures taken to ensure their continued presence.

Assessment of wildlife viewing objectives and opportunities has not been undertaken due to the difficulty of measuring the activity, determining future requirements and the influence of management action for other purposes. Indications presently are that the resource available is sufficient to meet demand. Guidelines at the district level will promote the maintenance of existing resources and the continuing availability of wildlife viewing opportunities.

SIMCOE DISTRICT

WILDLIFE PROGRAM

LEGEND

Wetlands

Wildlife Management

5 0 5 10 15 20 Kilometres

5 0 5 10 15 Miles

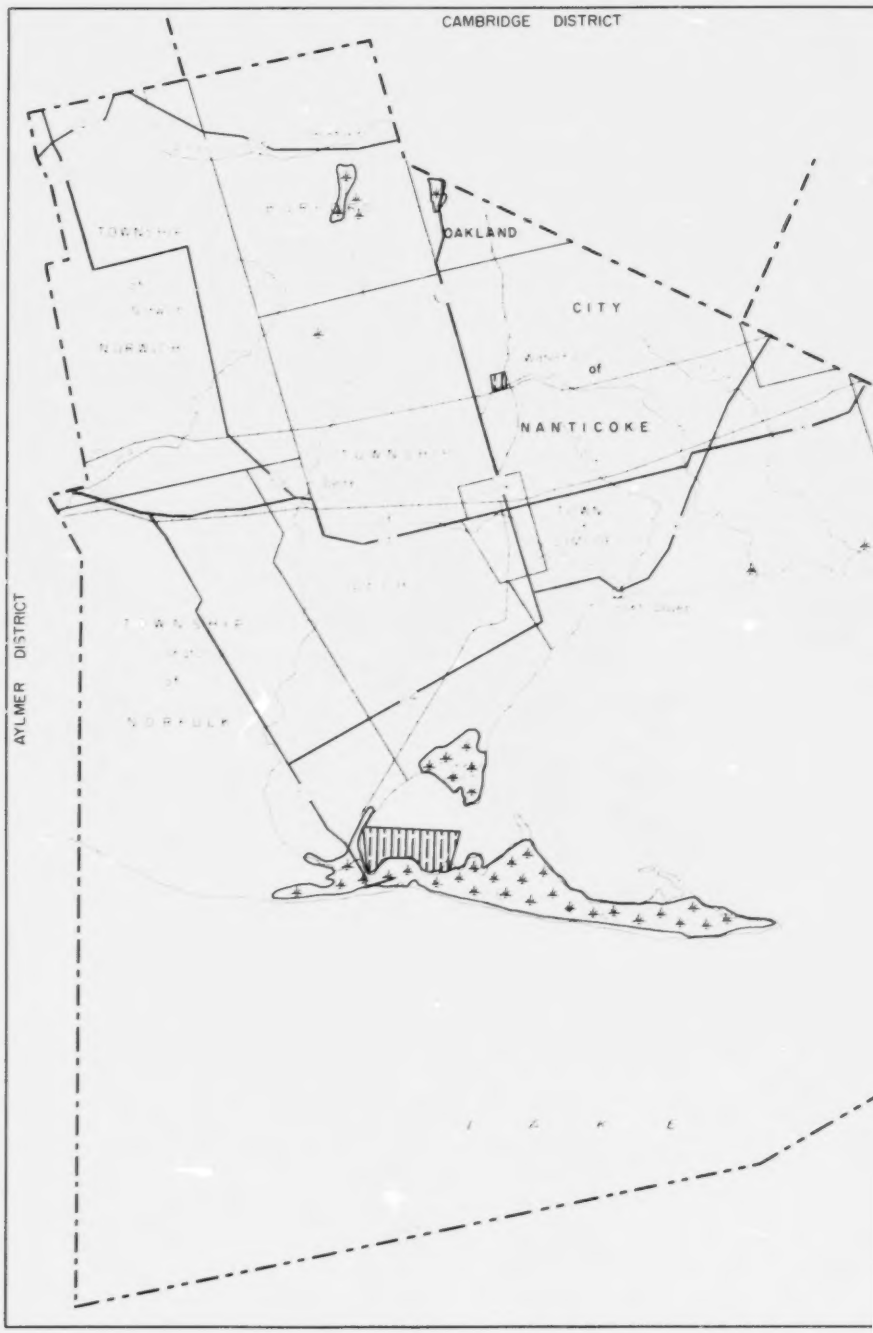


Figure 9

Area

4. STRATEGY

a. General

- protect and improve existing wildlife habitat
- protect, conserve and manage all wildlife species (both non-game and game) on public and private lands, and ensure the perpetuation of diverse high quality habitats.

b. Hunting

(i) White-tailed deer

- encourage and increase the availability of hunting opportunities on lands owned by conservation authorities, municipalities and private landowners.

(ii) Small Game

- undertake habitat improvement and expansion through landowner wildlife extension agreements, *Woodland Improvement Act* agreements or through other resource management activities (commercial timber cutting, erosion control projects, fisheries habitat improvement)
- encourage the protection of existing wildlife habitats (wetlands, scrublands, fencerows, etcetera)
- facilitate access to small game hunting opportunities on private lands, through liaison with private landowners, conservation authorities, municipalities, agricultural societies and sportsmen clubs.

(iii) Waterfowl

- protect and manage critical wetlands, lowlands and shorelines to ensure production, rearing, feeding and staging areas are available for waterfowl populations.

c. Trapping

- protect critical habitat components from development or major alteration (for example, wetland drainage)
- promote the continued availability of private lands and waters for trapping purposes.

d. Other Uses

- maintain viewing and interpretive programs in provincial parks and on other ministry lands
- support events which promote viewing of migratory waterfowl (Long Point) and migratory fish (Young Creek, Big Creek).

5. INTEGRATION

- wildlife management plans will consider all ministry programs
- wildlife management extension services will be available for woodland improvement agreement areas
- wildlife habitat development will be promoted as part of pit and quarry rehabilitation
- proposed wildlife management in provincial parks and earth and life science areas will be reviewed with appropriate staff and conform to approved master plans and interim management plans.

F: provincial parks

1. OBJECTIVE

The objectives for the provincial parks system in southern Ontario are:

Protection

- to protect provincially significant elements of the natural and cultural landscape of Ontario;

Heritage Appreciation

- to provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario;

Recreation

- to provide provincial park outdoor recreation opportunities ranging from high intensity day use to low intensity wilderness experiences; and

Tourism

- to provide Ontario's residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the province.

2. TARGETS

The targets for the provincial parks system in Simcoe District are:

Protection

- Earth Science To protect provincially significant, representative and special earth science features in Simcoe District which contribute to the representation of the thirty-five geological environments of southern Ontario;
- Life Science To protect provincially significant life science features in Simcoe District which contribute to the representation of each vegetative site type in the twenty-six site districts in southern Ontario;
- Historical Resources To protect provincially significant landscape-related prehistorical and historical resources which contribute to representation of the fourteen themes of southern Ontario's history;

Heritage Appreciation

- to provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Simcoe District; and

Recreation and Tourism

- to provide annually, by the year 2000, the following recreation opportunities for residents and visitors to provincial parks in Simcoe District:

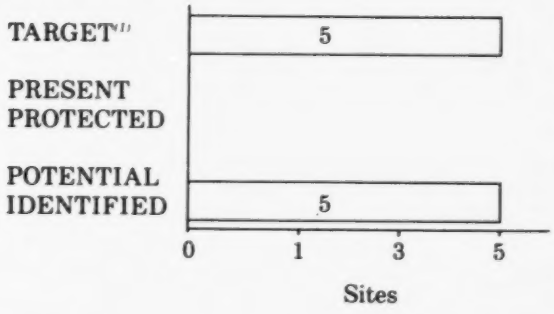
  Day Use
  - 1,459,600 swimming opportunities (7,190 metres of beach)
  - 482,700 picnicking opportunities (1,962 tables)

  Extended Use
  - 308,500 camping opportunities (1,324 campsites)

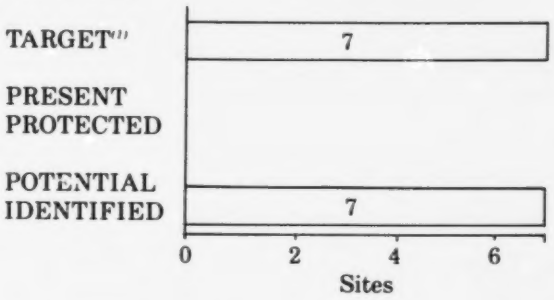
3. DISCUSSION

a. Protection

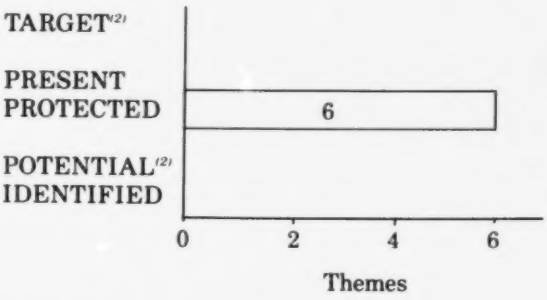
Earth Science



Life Science



Historical Resources



In Simcoe District, an assessment of all known earth and life science areas of natural and scientific interest has been conducted to determine which are the most significant features relative to the protection targets. An assessment of historical resources has not been completed.

(i) Areas of natural and scientific interest

These are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage appreciation, scientific study or education.

Areas of natural and scientific interest may vary in level of significance. The most significant may contribute to the achievement of the ministry's protection objective.

Where areas of natural and scientific interest occur on public lands managed by the ministry, it will ensure that the land uses and activities which occur, provide for the protection of identified values.

On private lands, the ministry will, through cooperation with others, attempt to ensure that landowners are aware of significant features on their properties and seek the owner's co-operation

(1) Long Point Provincial Park and Turkey Point Provincial Park afford partial protection to two sites.

(2) Analysis of historical resources presently incomplete.

SIGNIFICANT EARTH AND LIFE SCIENCE FEATURES

Site	Feature	Current Administrative Status (%)
Earth Science:		
Hemlock Creek	• representing the fossil content (abundant and diverse) and lithology of the Moorehouse member of the Onondaga formation	100% private
Sweets Corners	• a good exposure of the Clarence member of the Onondaga formation with an Edgecliff outlier in the middle of the exposure	100% private
Shoup's Farm Quarry	• contains the type section for the Springvale member of the Bois Blanc formation	100% private
Sandusk Falls	• excellent bedrock exposure at the waterfalls	100% private
Walsh	• post Lake Warren dunes, representing a raised shoreline	100% private
Life Science:		
South Walsingham Sand Ridges	• represents undulating sand ridges which alternate with wetter low lying swamps	31% public 69% private
Big Creek Floodplain	• a river valley complex with excellent examples of open floodplain communities, wet meadows, marshes, shrub thickets and oxbow ponds filled with aquatic vegetation	100% private
Backus Woods	• an outstanding example of Carolinian forest, flora and fauna. Sand ridge uplands (oak-red maple-white pine; beech-sugar maple) are separated by wetter, low lying swamps. A headwater source for Dedrick Creek.	59% public 41% private
Spooky Hollow	• includes the valley of Fishers' Creek and sand plain uplands extending west to Cranes' Creek	27% public 73% private
Long Point	• a major Great Lakes sandspit and shoreline marsh/wetland system	56% public 44% private
Turkey Point	• a major Great Lakes sandspit and shoreline marsh/wetland system	2% public 98% private
Delhi - Big Creek Valley	• a steeply cut section along the valley of Big Creek with excellent diversity of vegetation—deciduous floodplain terraces, cedar swamp, mixed slope forests and oak parklands at the valley rim with small prairie remnants	2% public 98% private

in protecting such features. The identification of areas of natural and scientific interest on private land does not indicate an intent of the ministry to acquire this land or to restrain or prevent any private use of land.

Areas of natural and scientific interest encourage the protection of additional areas not regulated as provincial parks and provide a focus for both the public and private sectors to contribute to the protection of Ontario's natural heritage.

(ii) Significant earth and life science features The features listed in the following table are the earth and life science features in Simcoe District which can best contribute to representation of the geological environments and vegetative site types of southern Ontario.

The total area of the significant earth and life science features is quite substantial. Purchase by the Crown of these areas would be neither practical nor acceptable. In most cases, it is not necessary for these areas to be devoted exclusively to protection and heritage appreciation in order to achieve provincial parks objectives.

The achievement of the protection targets in Simcoe District requires guidelines which will encourage the protection of these earth and life science features without undue infringement on existing land uses and property rights. It is expected that the list of these features and the extent of the areas delineated as being required to protect the earth and life science features in question, will be refined over time.

(iii) Historical Resources In Simcoe District, 6 of the 14 historical themes are represented in part within existing provincial parks.

Historical themes are groupings of historical activities of similar natures and times. They usually are represented by sites where specific relics are found or where historical events occurred.

These include archaeological sites in Selkirk and Turkey Point Provincial Parks and sites of known historical activity in Long Point, Selkirk and Turkey Point Provincial Parks.

b. Heritage Appreciation

The target for heritage appreciation is achieved

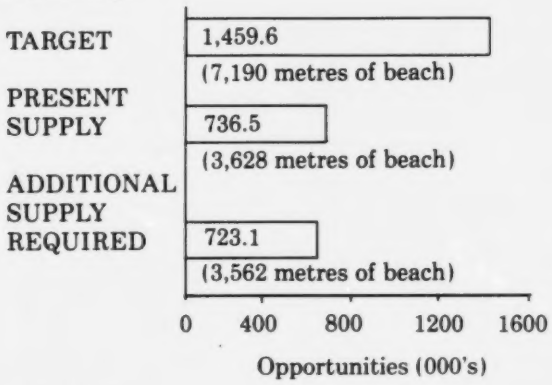
by providing opportunities for unstructured exploration and appreciation of the features of Ontario's natural and cultural landscapes, and its significant earth and life science features. Such opportunities are best provided in large areas wherein representative samples of Ontario's variety of natural and cultural landscapes may be found.

Presently, there are three provincial parks in Simcoe District that contribute to this target.

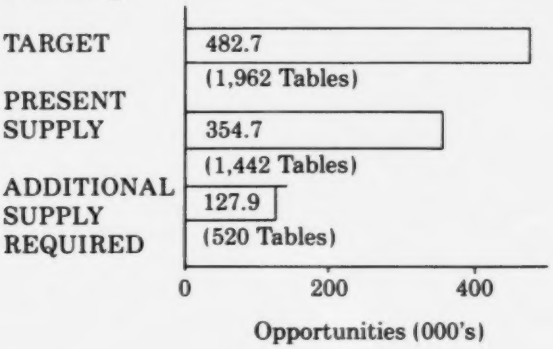
The heritage appreciation opportunities presently provided by the ministry in Simcoe District (together with those supplied in neighbouring Niagara and Aylmer Districts) are considered to adequately provide for the exploration and appreciation of the natural and cultural landscape of this area of Ontario. Other agencies, conservation authority and private parks, municipal museums, and areas of natural and scientific interest complement the ministry's heritage appreciation objective and target.

c. Recreation

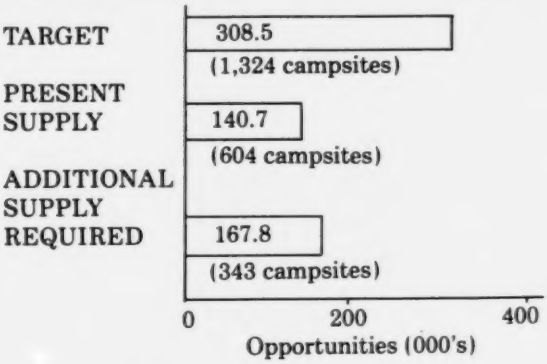
Swimming



Picnicking



Camping



The three district provincial parks—Long Point, Turkey Point, Selkirk—presently provide 3,628 metres of beach; 1,442 picnic tables and 604 campsites. In 1981, these facilities were utilized as follows:

Long Point Provincial Park
- 74,770 camper nights for an occupancy rate of 80%;
- 9,780 day use permits;

Turkey Point Provincial Park
- 25,100 camper nights for an occupancy rate of 30%;
- 1,382 day use permits;

Selkirk Provincial Park
- 18,197 camper nights for an occupancy rate of 30%;
- 1,603 day use permits.

These three recreation class parks, in association with available Crown land, are capable of meeting most of the recreation target. The required beach opportunities are available on Crown land lake frontages at Long Point and Turkey Point. Examination will be necessary to identify access, parking and other constraints prior to utilization of these facilities. An additional 340 campsites can be immediately provided at the existing three parks to accommodate increased demand to the year 2000. Sufficient Crown land area (adjacent to Turkey Point Provincial Park) is also available to accommodate the remaining need for 380 campsites as required to the year 2000.

Before a commitment is made to any specific course of action, detailed investigation is necessary to verify:

SIMCOE DISTRICT

PROVINCIAL PARKS PROGRAM

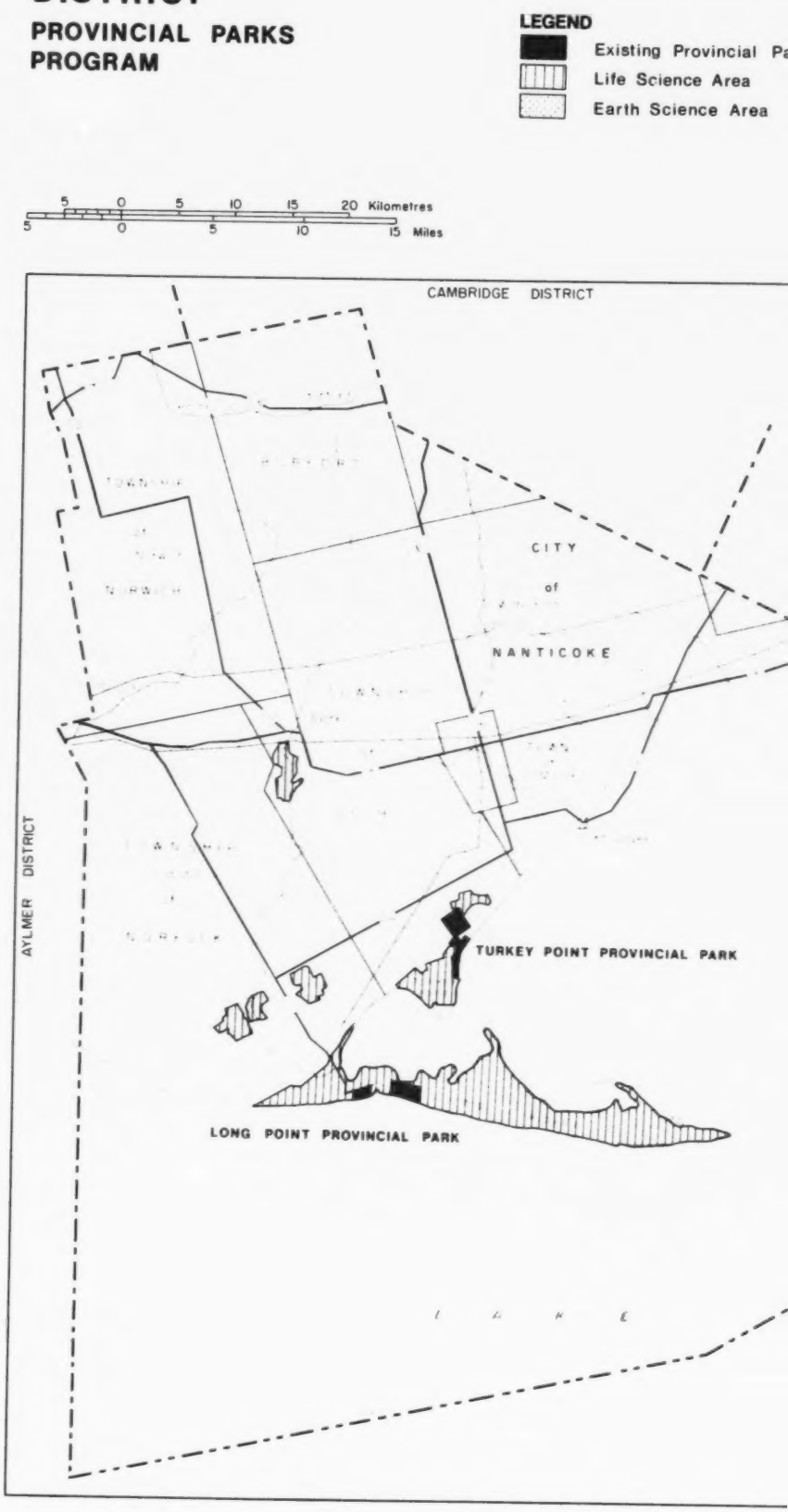
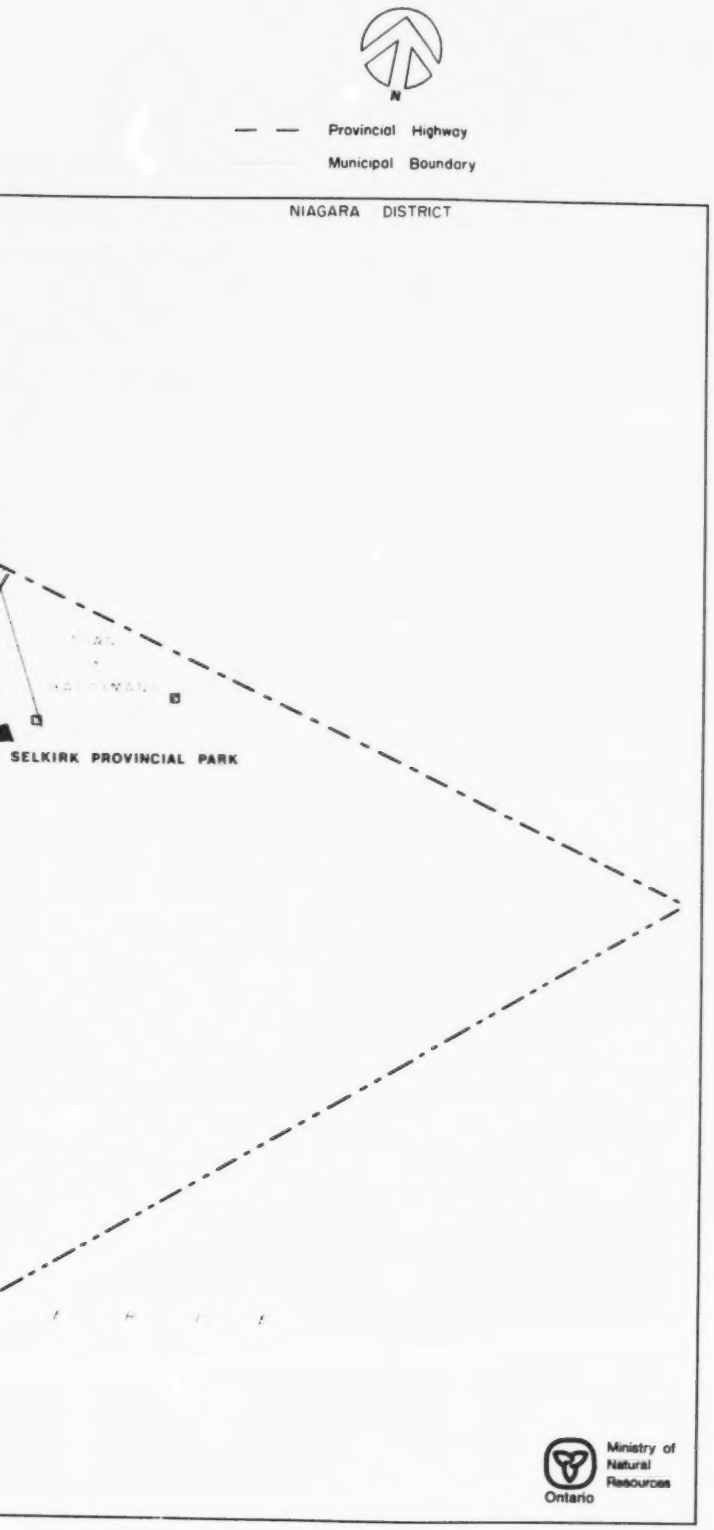


Figure 10


N
Provincial Highway
Municipal Boundary
NIAGARA DISTRICT
SELKIRK PROVINCIAL PARK
Ministry of Natural Resources
Ontario

- demand projections to confirm the need (if any) for additional facilities[1];
- present provincial park potential to accommodate additional demand
- the acceptability by other agencies (for example, conservation authorities) and individuals to providing a larger share of the necessary facilities.

d. Provincial Parks

In Simcoe District, the three existing provincial parks contribute to various provincial park targets:

Long Point Provincial Park

- contributes to achieving the targets for:
  - protection of earth science features;
  - protection of life science features;
  - heritage appreciation; and
  - recreation and tourism.

Turkey Point Provincial Park

- contributes to protection of historical resources in addition to those for Long Point Provincial Park.

Selkirk Provincial Park

- contributes to achieving the targets for:
  - protection of historical resources;
  - heritage appreciation; and
  - recreation and tourism.

No one park can be all things to all people. Accordingly, to provide a diversity of heritage appreciation and recreation experiences, different park environments are required. Distinctive experiences and park environments are provided through six classes of parks: waterway, wilderness, nature reserve, historical, natural environment and recreation parks. It follows therefore that these park classes are intended to be a primary means through which park objectives and targets are implemented throughout Ontario's provincial park system.

4. STRATEGY

In order to implement the provincial parks targets, the ministry plans to pursue the following:

a. Protection

- conduct, where it is felt necessary by the ministry, a more detailed study of a feature where it is anticipated that protection of the feature might be a land use or land planning concern.
- encourage investigations to identify and study areas of natural and scientific interest, and foster an exchange of information about them with municipalities and conservation authorities, and upon request, with individuals or interested parties.

b. Heritage Appreciation

Opportunities for unstructured exploration and appreciation of the natural environments and historical features within existing provincial parks will be provided through visitor services. Visitor services programming may include a wide variety of communications, recreation, interpretation and outdoor recreation messages or activities.

The ministry will work in co-operation with the Ministry of Citizenship and Culture and other groups and agencies to encourage the development of heritage appreciation programs for natural, cultural and historic resources on Crown lands and where appropriate, on private lands.

c. Recreation and Tourism

- Long Point, Turkey Point and Selkirk Provincial Parks will operate to contribute to the achievement and provision of recreational opportunities.

d. Provincial Parks

- continue the operation of Long Point, Turkey Point and Selkirk Provincial Parks as recreation class parks
- protect significant earth and life science features through means such as landowner agreements rather than by creating new nature reserve class parks.

5. INTEGRATION

- integration of other program interests when compatible with parks objectives will be incorporated in preparing master plans, interim management plans and through modifications to existing documents
- agreement will be sought with private landowners or other public agencies to protect significant earth and life science features
- protection of significant earth and life science features will consider the interests of other ministry programs.

(1) In this regard, initial projections made allowance for a much more rapid growth in the population of Haldimand-Norfolk than has occurred.

G: general recreation

1. OBJECTIVE

The ministry's recreation management efforts are directed primarily to hunting, fishing and provincial parks. There are a number of other activities which the ministry carries out for which no objectives have been developed.

Tentative objectives for general recreation in southern Ontario are:

- to provide and to encourage a wide variety of outdoor recreation opportunities ranging from day use to backcountry experiences;
- to identify, select and protect provincially significant natural and cultural resources; and
- to provide an economic contribution through tourism.

2. TARGET

No targets have been developed for outdoor recreation on Crown and other lands outside provincial parks, other than for hunting and fishing.

3. DISCUSSION

No targets or potential figures have been developed for this program as the activities are not of an organized nature. The wide range of activities from nature appreciation to hiking to snowmobiling do not occur exclusively on public or private land.

The ministry directly contributes to the achievement of general recreation objectives by providing trails and other recreation facilities on agreement forest lands, wildlife management areas and other Crown lands. For example, appropriate forested areas at the St. Williams Tree Nursery complex are available for trail use and other general recreation pursuits. Numerous groups and agencies also contribute to the achievement of these objectives by developing trails and other recreational facilities and protecting significant natural and cultural resources.

The ministry will assist groups and agencies through the granting of permission to develop recreational trails on appropriate public lands. The ministry will also maintain contact with local trail clubs and will provide advice on the development and management of facilities by these and other suppliers of general recreation.

It is also part of the ministry's objective to provide on Crown land and encourage on private land, a continuous contribution to the economy from tourism and its related industries.

The Lake Erie shoreline and inland water bodies of Simcoe District are important recreation and tourism resources. Recreation and tourism provides an important, although in many cases, seasonal contribution to the local economy.

4. STRATEGY

- provide outdoor recreation planning and management advisory services to other agencies upon request
- provide general outdoor recreation opportunities on agreement forests and Crown land holdings as deemed appropriate
- maintain existing access points to general recreation areas
- propose the acquisition of lands for public access, particularly along the lakeshore of Long Point Bay as demand indicates
- encourage the development of trails and related facilities for use by hikers, snowmobiles, skiers and others
- encourage municipalities to provide public access to waterbodies by retaining unopened road allowances.

5. INTEGRATION

- all ministry programs will consider the provision of general recreation objectives in their operations
- trail establishment in significant earth and life science feature areas will consider the protection objectives of the area prior to development.

H: land administration

1. OBJECTIVE

The objective for land administration in southern Ontario is to facilitate the orderly development and conservation of Ontario's land and water resources.

2. TARGET

Specific land administration targets have not been developed. Land administration serves all ministry programs and is represented in the targets of individual programs.

3. DISCUSSION

The ministry has a custodial responsibility for the 6,700 hectares of Crown land in Simcoe District. This is carried out in a variety of ways including:

- asserting proprietary interest;
- dealing with illegal occupations;
- acquiring lands as required by programs to meet their objectives and targets;
- disposing of land to private interests which benefit the ministry and are in accordance with the policies and designations of land use in Official Plans; and
- maintaining up-to-date records on land grants.

Land administration will continue to be a support function for all ministry programs and objective and target achievement.

4. STRATEGY

- manage Crown lands under the *Public Lands Act* and according to approved plans
- administer the interim property management program for acquired lands
- maintain the Crown's proprietary interest in land.

5. INTEGRATION

- Crown land will be utilized by all programs to assist in meeting their objectives and targets
- all program interests will be considered prior to land disposition.

1. GENERAL GUIDELINES

The natural resources presently exist in Simcoe District to permit effective program delivery. By the year 2000 however, the level of management, the integration of activities, the emphasis of assistance programs and the provision of advisory services will have to increase to fulfill certain targets and objectives.

Application of the *Simcoe District Land Use Guidelines* is the responsibility of Simcoe District and will be achieved by:

- continuing to co-operate with municipalities, conservation authorities, other government agencies, private individuals and special interest groups;
- increasing the provision of assistance and advisory services to landowners;
- involvement in the planning processes of others through plan input and review to ensure the quality and integrity of natural resources are protected;
- ensuring management activities are consistent with the principles of this document;
- preparing detailed resource management plans for specific programs, identifying how objectives and targets are to be achieved; and
- ensuring integrated resource management.

In Simcoe District, the general policy of integrated resource management will be considered by all programs. The commitment to this policy will be ensured by the District Manager and individual program supervisors.

For the purposes of graphically portraying the various natural resource management areas in Simcoe District and defining program emphases, a *General Resource Areas Map* is included in a back pocket of this report. This map identifies 5 areas being:

- Multiple Resource Management, Zone I;
- Multiple Resource Management, Zone II;
- Great Lakes Shoreline;
- Great Lakes (Lake Erie); and
- Urban/Industrial.

These areas are based upon differences in resource capabilities and uses and management philosophies.

The ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners in any effort to achieve effective and integrated resource management. The Ministry of Natural Resources will continue to work with these groups, especially with municipalities through the ministry's plan input and review program to promote consideration of resource values.

2. SPECIFIC PROGRAM MANAGEMENT GUIDELINES

a. Forestry

- co-operate with the local forest industry in research, marketing and harvesting techniques, wood utilization and supply
- develop a communications program for forest management to foster:
  - public awareness of the multi-benefits of good forest management
  - agricultural benefits from maintenance of existing forested land, the reforestation of idle lands and the establishment of windbreaks
  - public awareness of ministry assistance programs and forestry advisory services
  - public awareness of basic forest ecology
  - good management and operating techniques by commercial timber operations
- promote fuelwood as a viable woodlot product
- promote forestry agreements in under-represented areas
- promote recognition for forests and their management at the municipal level
- assist the local municipalities with administration of their tree cutting by-laws
- conservation authorities and municipalities will be encouraged to support forest management on their properties (agreement forests, county forests).

b. Mineral Aggregate

Administer and enforce provincial mineral aggregate resources legislation so as to:

- be as compatible as possible with surrounding land uses and activities
- encourage the rehabilitation of depleted sites to their former use or a condition that is compatible with adjacent land uses
- encourage ongoing rehabilitation where possible
- encourage sequential land use of mineral aggregate areas
- ensure that basic mineral aggregate data is available to other government agencies, municipalities, the industry and the public
- continue to assess the potential aggregate supply areas
- monitor market trends to identify aggregate requirements
- inventory and rank abandoned pits and quarries for possible future rehabilitation.

c. Minerals and Fossil Fuels

- evaluate the mineral resource potential of an area before a permanent commitment of public land to non-mining uses occurs
- identify, evaluate and inventory all known mineral and fossil fuel deposits and high potential aggregate areas for planning purposes
- provide resource base data for the exploration industry
- ensure that all resource development and extraction takes place in conformity with existing and applicable government acts and regulations
- identify and address all hazards related to past and present resource development activities
- promote market research into uses of industrial by-products
- ensure that all information pertaining to a resource and its utilization is available and discussed at all levels of government prior to resource development
- encourage research into the marketability and application of clay resources and marl deposit
- encourage research, exploration and development of gypsum and lead-zinc sulphide deposits
- encourage development and use of new technologies for more efficient and safe extraction of mineral resources
- encourage an increase in natural gas and oil production
- encourage secondary and tertiary recovery of oil and gas resources from abandoned fields
- encourage deep drilling for exploration of oil and gas formations
- investigate industrial uses for the by-products of oil and gas production
- encourage the use of enhanced recovery techniques to maximize oil and gas recovery from production fields.

d. Fisheries

(i) Sport fishery:

- inventory the relative abundance, distribution and potential harvest yields of warm water and cold water species
- continue refinement of predictive modelling
- promote recreational use of presently under-utilized species
- rehabilitate fisheries habitat through the use of community involvement projects
- use appropriate legislation to protect fisheries habitat
- promote land use practices compatible with good water conservation
- encourage alternative water storage methods as opposed to watercourse blockage (dams)
- promote environmentally sound municipal drain construction and maintenance techniques
- promote recognition of critical fisheries habitats
- rehabilitation measures, especially on cold water streams be undertaken
- promote Community Involvement Projects
- in co-operation with conservation authorities, inventory their ponds and reservoirs.

(ii) Commercial fishery:

- inform commercial fishermen of the population dynamics of Lake Erie fish communities
- enforce legislation and regulations pertaining to commercial fishing
- maintain the commercial harvest at levels appropriate to relative abundance and biological productivity
- encourage research to identify practical methods of selective commercial fishing
- monitor the effects of contaminants upon fish communities
- refine the predictive models as tools of management based upon new information
- encourage market research into uses of presently under-utilized fish species (shad, drum, etc.)
- rehabilitate the fish communities of Lake Erie
- establish harvest limits based upon sustainable yield
- manage fish communities rather than individual species.

(iii) Bait fish:

- collect resource assessment data
- conduct research into predictive model establishment
- permit participation in the industry at a level

commensurate with the resource capability
- manage the resource on a community basis
- satisfy local markets before export markets.

e. Wildlife

(i) General:
- establish an inventory system which will indicate distribution and relative abundance of (a) deer, (b) economically important furbearers and (c) *indicator species* of small game (for example, cottontails, ruffed grouse)
- incorporate concerns for wildlife into the district's forest management plans
- encourage landowners to manage woodlots for forestry and wildlife purposes jointly
- manage demonstration areas to illustrate effective habitat management techniques
- utilize wildlife landowner extension agreements under the *Game and Fish Act*
- encourage involvement of the public in wildlife habitat management
- promote the establishment of an effective extension program for wildlife habitat maintenance through co-operation with the local federation of agriculture, the Ministry of Agriculture and Food, and the local conservation authority
- continue, improve and expand the existing education programs through:
  - expansion of hunter and trapper education programs with emphasis on proper hunting and trapping ethics and respect for private landowner rights
  - incorporation of wildlife messages into wildlife viewing sites and opportunities and
  - maximize input into the education programs of other agencies (for example, Canadian Wildlife Service at Big Creek, Ducks Unlimited, local school boards, agricultural organizations)
- ensure harvest levels of various game species reflect abundance and are consistent with the maintenance of healthy wildlife populations
- work co-operatively with government agencies at the federal, provincial and municipal levels, and with private landowners, developers and other members of the private sector to achieve the protection of all wildlife resources (both non-game and game)
- encourage greater non-government participation in the identification and management of wildlife, in particular, endangered, threatened or rare species
- provide extension services which promote an understanding of the value of wildlife resources (both non-game and game), and non-consumptive uses, and which enhance social benefits and tourism
- provide habitat management consulting services to landowners
- provide enforcement of the *Game and Fish Act* sufficient to maintain wildlife populations
- promote wildlife habitat recognition and protection
- acquisition of additional land will be promoted where significant contribution to target achievement can be obtained (for example, wetlands, etc.)
- prepare management plans for all important wildlife habitats
- enter into agreements with property owners to ensure habitat on private land is protected
- acquire critical habitat areas where necessary and feasible.

(ii) White-tailed deer:
- manage white-tailed deer using a variety of deer harvest and habitat management techniques
- reduce the loss of deer by poaching through increased enforcement and greater public co-operation
- reduce the loss of deer through road kills by:
  - educating motorists of deer habits
  - advising motorists of deer movement zones and periods
- undertake predator control of domestic dogs and wild predators as necessary during critical deer stress periods (severe winters).

(iii) Small game:
- reduce the loss of small game by poaching through stronger enforcement and greater public awareness and co-operation.

(iv) Waterfowl:
- encourage private landowners to protect wetland and lowland through extension and education programs
- assess the feasibility of expansion of existing waterfowl hunting areas and facilities (Long Point Wildlife Management Unit and Waterford Lakes) and the development of new wildlife management unit facilities on inland waterbodies and wetlands.

(v) Trapping:
- monitor and assess yields to ensure sustainable harvest, even geographic distribution of trappers, and furbearer population maintenance. Initiate suitable management techniques (management units, etc.) to correct identified fur harvest problems
- improve public attitudes regarding trapping.

(vi) Other uses:
- co-operate with other agencies that provide viewing opportunities
- promote appreciation of wildlife, wildlife habitat and wildlife ecology through public education

- protect, conserve and manage all wildlife species (both non-game and game) on public and private lands, and ensure the perpetuation of diverse high quality habitats
- identify endangered, threatened or rare species, significant populations of wildlife species (both non-game and game) and protect or manage these populations if the best available scientific, social and economic data indicate that such action is necessary to achieve the objectives and targets.

f. Provincial Parks

- develop approved master plans for existing provincial parks and nature reserves. Areas significant to all programs will be considered during master planning
- encourage public appreciation of significant earth and life science features by developing interpretive material on the district's system of significant earth and life science features, which will include information on the ownership of and public access rights to each feature so as to discourage unwanted intrusions on private property by those interested in the significant earth and life science features of the district
- prepare suggested management guidelines for identified significant earth and life science features. Implementation of the protection objective can be promoted by:
  - discussion with the landowners as to details of protection and their involvement
  - encouragement of public appreciation through interpretative and educational programs
  - encouraging the recognition of significant earth and life science features
  - maximizing the degree of resource management integration within the ministry to ensure management operations are consistent with the objective of the property
  - securing agreements from the landowners for continued protection
  - appropriate comment and action during review of development proposals
  - participation by other agencies (for example, naturalists clubs, conservation authorities)
- provide opportunities for unstructured exploration and appreciation of the natural environments and historical features within existing provincial parks through visitor services. Visitor services may include a wide variety of communications, recreation, interpretation and outdoor recreation messages or activities.

g. Land Administration

- maintain up-to-date records of land grants and dispositions
- undertake navigability studies of watercourses for administrative purposes
- dispose of Crown lands to the private sector which benefit ministry programs. Private use of Crown lands is to be compatible with municipal land use designation and environmental quality
- monitor the private use of Crown land to ensure quality management
- ensure revenue interests of disposed Crown lands by undertaking land appraisals
- co-ordinate ministry land acquisitions
- co-operate with the local conservation authority in municipal plan input and review functions
- regulate under the *Public Lands Act*, the dumping of fill and other materials and the construction of docks, marinas or other facilities on Crown land
- regulate under the *Beach Protection Act*, the removal of earth and materials from the bed, bank, beach or shore of lakes and streams
- regulate under the *Lakes and Rivers Improvement Act*, the construction of dams, ponds or other watercourse alterations where such works affect or interfere with the natural resources.

3. CROWN LAND

Crown land in Simcoe District comprises approximately 2.3 percent of the total land base available for resource management. This land base is utilized for provincial parks (three), forestry research, tree seedling production, wildlife management, hunting (Long Point) and fishing and gas exploration. As the demand for resources increases, greater emphasis will be placed upon the principle of integrated resource management to maximize benefits and increase efficiency. Resource management plans, work plans, interim property management plans and master plans will identify management directions consistent with the guidelines of this document for Crown lands.

4. PRIVATE LAND

The control of land use on private land in municipalities is exercised by those municipalities under the authority of the *Planning Act* which is administered by the Ministry of Municipal Affairs and Housing.

In Simcoe District, the majority of land is in private ownership. It is imperative therefore, that the ministry work closely with private landowners to protect and manage the natural resources of the area.

Presently the ministry assists landowners in identifying the potential of natural resources through the provision of specific services. Such services will need to be improved and expanded if the increased demands for resource utilization are to be met. Implementation of this approach will be by:

- providing easy and effective access to information on resource management options;
- public education programs to inform of resource values and good management practices. These programs will include workshops, demonstrations, news releases and distribution of literature;
- scientific and technical advice and extension services on activities such as tree planting, pond stocking and hazard lands delineation;
- landowners will be encouraged to participate in subsidized programs such as the managed forest tax reduction program, *Woodlands Improvement Act*, wildlife management area agreements; and
- development of new and innovative mechanisms and agreements to encourage effective resource management.

5. MUNICIPALITIES

The *Simcoe District Land Use Guidelines* will serve as the basis for ministry involvement in municipal planning.

The ministry will consult with municipal officials and private landowners where the *Land Use Guidelines* indicate the ministry wishes to promote a particular land uses on private land.

In municipalities containing Crown land, there may be situations where municipal planning documents do not permit land uses on Crown land indicated as acceptable in the *Land Use Guidelines*. When this occurs, the ministry will undertake negotiations with the municipality to try and resolve the situation.

The ministry plans to:

- encourage the inclusion of policy statements in municipal planning documents as defined by the *Planning Act;*
- undertake plan review of development proposals, zoning and official plan amendments to ensure ministry concerns in the land base are recognized;
- provide technical guidance to municipalities;
- promote strong working relationships with municipalities; and
- request input from the municipality prior to disposition of Crown land in conformity with *Land Use Guidelines* but not in conformity to land use designation of the municipal official plan. In this way, the Crown land applicant could be required to adhere to conditions which would mitigate any negative impact of the proposed land use on others.

6. CONSERVATION AUTHORITIES

Conservation authorities are independent corporate agencies set up jointly, under the *Conservation Authorities Act*, by the local municipalities and the Province of Ontario to develop and implement water related land management programs.

The *Conservation Authorities Act* is administered on behalf of the Province of Ontario by the Ministry of Natural Resources.

Conservation authorities are presently completing watershed plans that will outline the long term direction of all authority programs. The primary program of conservation authorities in flood and erosion control complements the ministry's programs. Other conservation authority programs, particularly those in forestry, fish, wildlife and recreation supplement the efforts of the ministry. Both agencies are making every effort to reduce duplication and overlap in their planning and ensure that the delivery of resource management programs achieves the greatest possible benefits to the people of Ontario.

Three conservation authorities have jursidiction within the district, namely, Long Point Region, Grand River, and Upper Thames River. These agencies receive specific direction from residents of the district through members appointed to the authority by the municipalities in the watersheds. General program direction and technical assistance are provided by the ministry.

Conservation authorities can contribute to the achievement of ministry objectives and targets. Some existing authority programs could be integrated with ministry programs and initiated jointly. Examples of areas of mutual interest include:

- **hazard lands** development of detailed floodplain mapping and control of development;
- **forestry** management of forest cover on authority lands, provide for other uses of the forest, encourage and support plantings on private lands; and
- **outdoor recreation (hunting, fishing, trails, etc.)** provision of outdoor recreation opportunities and public access on appropriate authority lands.

7. OTHER AGENCIES AND INTEREST GROUPS

The ministry intends to work closely with other appropriate provincial and federal ministries.

The ministry recognizes the importance of agriculture. On private land, the ministry normally will not encourage or support activities or land uses which result in a long term loss of the amount of land in agricultural production. The ministry will encourage forestry, recreation and other compatible uses on high capability land presently not in agricultural production and promote the protection of watercourses and fish habitats in agricultural areas. Where uses such as mineral aggregate extraction occur, rehabilitation will be required to ensure that agriculture remains a long term option.

The ministry will work closely with the Ministry of the Environment in meeting its requirements under the *Environmental Assessment Act* and in monitoring impacts on the environment related to natural resources. The two ministries have jointly developed guidelines, in this regard, to address water quality and fisheries issues.

The Ministry of Natural Resources has responsibility for identifying the fisheries values of waterbodies with respect to meeting the Ontario Government's fisheries mandate. This identification is based on the *Land Use Guidelines* and local fisheries management plans, as developed. The Ministry of the Environment is responsible for determining existing water quality and predicting the effects of proposed development on water quality. The latter information is used by the two ministries to assess potential effects on fisheries values.

Long Point and surrounding waters are a focal area for many of the ministry's programs. It is the intent of this ministry to work closely with the Canadian Wildlife Service, and area landowners to ensure the long term protection and wise management of the point and its resources.

Input from the many public interest groups locally and provincially will be encouraged in all the public participation programs of the ministry. Co-operation with interest groups will continue and expand.

APPENDIX

A: highlights of public consultation

Public consultation is important to the land use planning process.

In southern Ontario, and in particular, Simcoe District, the majority of land upon which the ministry wishes to attain its targets is in private ownership. Thus, to effect a spirit of mutual co-operation and direction, private landowners must be involved in the planning process and the direction.

Public involvement began in the preparation of the *Simcoe District Land Use Guidelines* with the holding of 'open houses' in June, 1982. For two days at the Simcoe Mall, Simcoe, the collected information was displayed. The public was asked to comment on the accuracy of the information and provide any additional knowledge they had of the planning area and raise any problems or issues which should be addressed. During this phase of public participation, over 300 copies of the *Background Information Summary* were distributed to interested groups and individuals.

In July, 1982, the *Draft Simcoe District Land Use Strategy* was released and on August 13 and 14, additional open houses at the Simcoe Mall were held to explain the direction proposed. For this phase of the planning exercise, 295 draft strategies and approximately 1,100 summary tabloids were distributed for public comment.

The public participation process, from June to November 1982, resulted in the receipt of 73 written responses and numerous verbal comments which greatly assisted in the preparation of these guidelines.

Copies of comments received on the *Draft Simcoe District Land Use Strategy* during public consultation are available for viewing in the Simcoe District office, the ministry's main office public reading room and the Legislative Library at Queen's Park.

TABLE 2 SUMMARY OF CONTACTS

No. of Background Information Open Houses	2
Background Open House Attendance	132
No. of Draft Strategy Open Houses	2
Draft Strategy Open House Attendance	251
Comment Sheets Distributed	142
Draft Strategies Distributed	295
Phone Calls Received	6
Speeches Made	0
Meetings with Municipalities	3
Meetings with Conservation Authorities	2
Meetings with Other Agencies	0
Meetings with Interest Groups	1
Interviews with Media	7

TABLE 3 SUMMARY OF RESPONSES[2]

Response Documentation / Category of Respondent	Indiv.	C.A.	Government Agency	M.P.P.	Munic.	Interest Group[1]	Industry[1] (Co. or Assoc.)	Category Unknown (Anon.)	All Categories (Total)
Background Open House Comment Sheet	5								5
Background Open House Record of Conversation	2							2	4
Draft Strategy Open House Comment Sheet	7								7
Draft Strategy Open House Record of Conversation					1			2	3
Mailed Comment Sheet	4								4
Letter/Brief	11	3	5	2	5	6	3		35
Record of Conversation	4	1	2		7		1		15
	33	4	7	2	13	6	4	4	73

(1) Only responses received from official representatives.
(2) To November 1, 1982.

GLOSSARY

Capability
The natural ability of an area to provide continuous opportunity for benefits under an assumed level of management.

Capacity
The upper limit to which an area of land, or water, may be used or developed without an undesirable change taking place in the environment. Also called "carrying capacity."

Cold Water Habitat
Waterbodies having characteristics that support cold water fish species, such as trout, whitefish, ciscoe.

Commercial Fishing
The taking for sale of fish other than game fish, by means of any hook-line, trolling line, spear, minnow-trap, dip-net, gill-net, hoop-net, pound-net, seine-net, trammel-net, trap-net or trawl-net.

Crown Land
All land (including land under water) held by the province, both land which has never been sold and land which has been re-acquired.

Earth Science Feature
Public or private land which contains geological features that are of provincial significance.

Earth Science Site
Public or private land where landforms of provincial interest have been identified.

Fish Community
An aggregation of different fish species living and interacting together.

Forestry Purposes
Includes the production of wood and wood products, provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation, and protection and production of water supplies.

Furbearers
Animals having commercially valuable pelts, including beaver, mink, marten, otter, muskrat, fisher, fox, raccoon, wolf, lynx.

Goal
A general purpose to which the ministry aspires.

Hazard Land
Land, which because of its physical characteristics in combination with its location, present a risk for its occupants including loss of life, property damage and social disruption (example, flooding).

High Potential Resource Areas (Sand and Gravel)
Generally, those deposits thicker than 20 feet (6 m) and containing more than 35 percent crushable gravel are evaluated with relation to deposit size, aggregate quality and location along with the assessment of resources in relation to the distribution in the region in which the municipality is located.

High Potential Resource Areas (Stone)
Selection criteria similar to that used for sand and gravel deposits are used along with drift thickness (i.e., 3 to 25 feet; 1 to 8 m) and laboratory testing for performance and suitability data.

Integrated Resource Management
The co-ordination of resource management programs to ensure that conflicts are minimized and that management which would benefit several programs is encouraged. Integrated management encourages multiple use, but recognizes that in some circumstances, management of areas for a single purpose may be necessary.

Interim Property Management
To provide management of land acquired by the ministry until such time as management is assumed by the intended user group.

Interim Use
Land and resource use and management practices which are permitted to occur over a period of time prior to the initiation of another identified use.

Land Use Planning
A process which culminates in a commitment regarding the use of land.

Land Use Guidelines
A document which displays direction concerning the use of land and water in a defined area. It identifies where and how the ministry can achieve its objectives in a specific district through the use of Crown land and through influencing the use of private land.

Life Science Feature
Public or private land where a natural habitat of provincial interest has been identified.

Management
The judicious use of means to achieve ends. Management may have various levels of intensity.

Multiple Use
A resource management or planning concept applied to very large areas to indicate that all basic uses are accommodated. Typically, two or more uses may occur on the same general area at the same time or in sequence.

Objective
A quantifiable end result to be achieved.

Occasion
A measure of actual recreational use describing the number of times a recreation resource or facility is used by individuals in a given time period. An occasion is considered not to exceed one day in duration.

Operational Plan
A part of a resource management plan stating the extent (includes human and financial resources) of all work of any nature to be carried out during one or more years of the management period.

Opportunity
A measure of recreation supply. It is used to describe the number of times a resource or facility can be used (occasions of use) in a given time period. An opportunity is considered not to be greater than one day.

Optimum Sustainable Yield
The concept refers to the maximum level of resource harvest which can be sustained on a long-term basis without causing detrimental effects on the resource base.

Policy
A decision concerning the objectives to be achieved and the means of achieving them.

Production Forest Land
An area dedicated to the growing of merchantable timber or the production of other forest products.

Productive Forest Land
Those lower capability agricultural lands, both forested and open, and higher capability lands with existing forest cover, from which the ministry hopes to achieve their forestry targets.

Program
An activity undertaken by the ministry to provide a service or manage a particular resource.

Protection Forest
An area wholly or partially covered with woody growth, managed primarily to regulate stream-flow, prevent erosion, hold shifting sand or exert any other beneficial influence.

Public Land
Any land owned or administered by a public body or agency. It includes federal, provincial and municipally-owned lands and lands held by agencies such as parks commissions and conservation authorities.

Recreation Park
An area which supports a wide variety of outdoor recreation opportunities for large numbers of people in attractive surroundings.

Resource
Any commodity that meets a need.

Resource Management
The control and co-ordination of the use of resources to achieve specific ends. Commonly applied in particular to natural resources.

Resource Management Plan
A plan by which the policies, objectives and targets usually of an individual program (except in the case of an integrated resource management plan), are implemented for a specific resource.

Sequential Use
Where one use is followed by another in planned sequence.

Sport Fish
For the purpose of this document sport fish are the top predator species sought after by anglers.

Strategy
Planned actions or measures to achieve a desired end.

Succession
The replacement of one plant community by one of a different nature over time.

Surface Rights
All rights in land, other than mining rights, including sand and gravel deposits.

Target
A quantified end to be achieved or completed by a specific date.

Tolerant Hardwoods
Includes the following species: sugar maple, beech, basswood, yellow birch, red oak, and white ash. The term "tolerant" refers to the ability of these species to tolerate moderate levels of shade.

Wetlands
Lands which are permanently or seasonally covered with shallow water and where distinctive soil conditions, plant and wildlife communities develop. These include wetland forests (swamps), wetland thickets, marshes, bogs and fens.

Work Plan
A plan prepared annually which defines what management activities are to be undertaken for that year.

SIMCOE DISTRICT

GENERAL RESOURCE AREAS

5 0 5 10 15 20 Kilometres

5 0 5 10 15 Miles

(2) Provincial Highway

Municipal Boundary

CAMBRIDGE DISTRICT

NIAGARA DISTRICT

401

53

59

Whitmans

Burford

BURFORD

TOWNSHIP

of

Norwich

NORWICH

OAKLAND

24

CITY

of

Waterford

D

MC

Sandusk

E

Otter

Nant

CNR

NANTICOKE

A

Block

3

TOWN

of

MC

Big

Dairy

Figure 11

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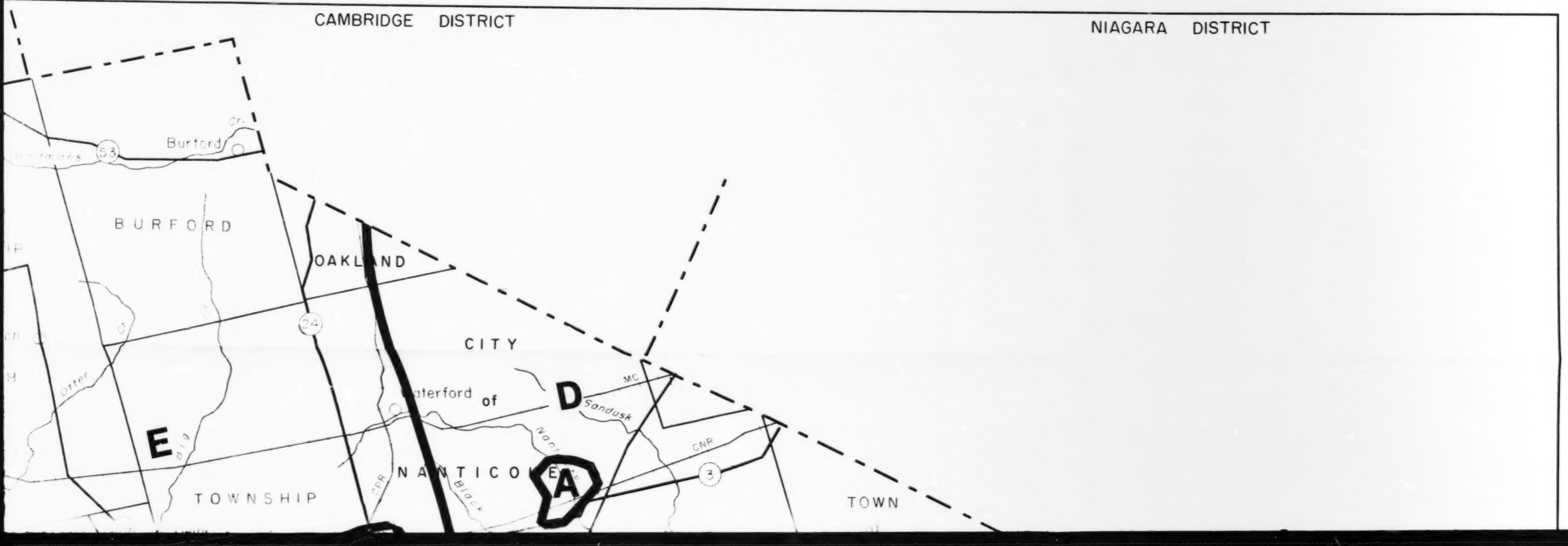
RESOURCE AREAS

5 10 15 20 Kilometres

5 10 15 Miles

(2) Provincial Highway

Municipal Boundary



AYLMER DISTRICT

of Norwich

NORWICH

TOWNSHIP

Delhi

DELHI

TOWNSHIP

Langton

of

NORFOLK

CITY

of

NANTICOKE

TOWN

SIMCOE

TOWN

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HALDIMAND

Port Dover

TURKEY POINT

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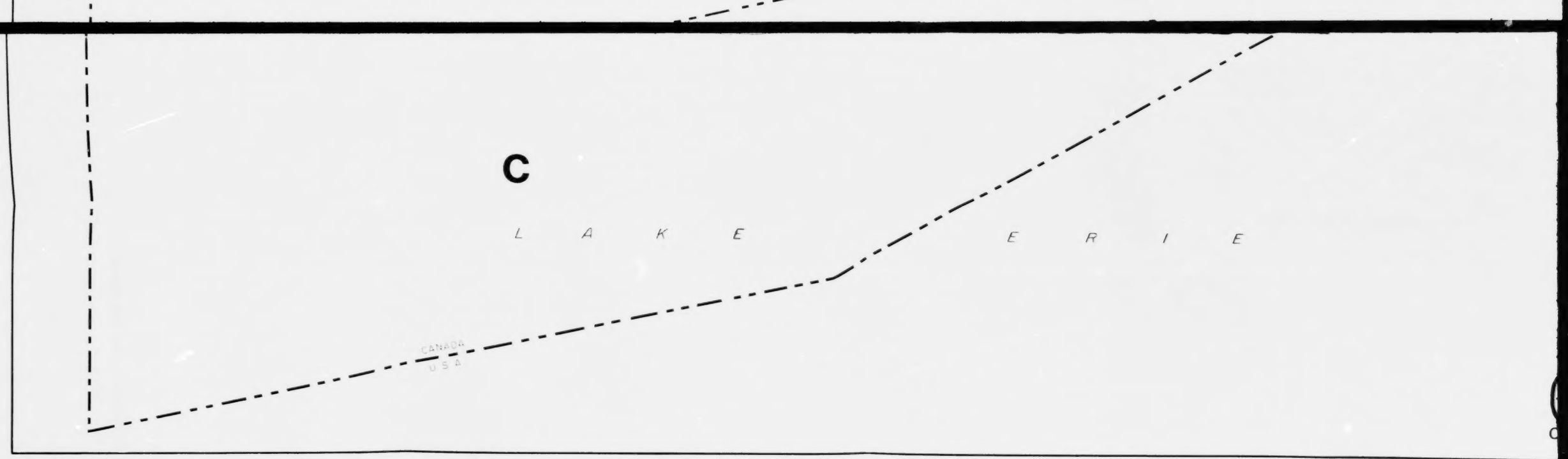

A: URBAN/INDUSTRIAL

Character
Since the population throughout Simcoe District is predominantly rural, there are few urban or industrial areas. Recent industrial development at Nanticoke indicates a trend to an increase in concentrated urban centre growth.

Resource Management Guidelines
The Ministry recognizes that resource management in these areas must be conducted within the context of urban growth. Encouragement and direction will be provided to individual landowners and municipalities to utilize resources and maximize opportunities available either in conjunction with urban growth or sequentially. Management direction will concentrate upon: public safety, forestry, wildlife, sport fisheries, and other recreation.

B: GREAT LAKES SHORELINE

Character
The shoreline is dominated by the presence of the Turkey Point and Long Point sandspits. The western portion of this area has sandy soils and steep erosion prone embankments. The eastern section consists of clay soils with bedrock upcrops.
Important wetlands, wildlife habitats, service facilities (marinas, harbours), access points and recreational nodes occur along the shoreline.

Resource Management Guidelines
Within this management zone, the Ministry wishes to promote land uses that recognize the importance and sensitivity of the area and enhance the natural resources. Management and preferred land uses will be directed to minimizing impacts upon the area and continuing access to the resources of the shoreline and Lake Erie. Ministry emphasis will be:
- public safety - recognition and avoidance of natural hazards (flooding, erosion)
- forestry - retention of protection forest cover and reforestation of erosion prone lands
- sport fisheries - maintenance of fishing access and management for the continued health of the resource
- wildlife - maintenance of wetland habitats for waterfowl, furbearers, and other wildlife species
- parks - continued operation of the three provincial parks and encouraging the protection of the significant earth and life science features
- lands administration - management of Crown Lands (multiple use)

C: GREAT LAKES (LAKE ERIE)

Character
Shallowest of the Great Lakes, Lake Erie is biologically productive. Shallow waters, shoals, and marshes provide ideal habitats for fish and wildlife.
Many uses are made of these waters including shipping, commercial and sport fishing, natural gas production, and recreation.

Resource Management Guidelines
Management effort will be directed towards minimizing land impacts (sedimentation, contaminants) upon water quality and providing access to the resources. Ministry emphasis will be:
- sport fisheries - continued health of the resource and maintenance of access
- commercial fishing - continued health of industry and rehabilitation of fish stocks
- fossil fuels - natural gas production
- recreation - provision of water based activities (swimming, boating, hunting)
- lands administration - management of the crown bed of Lake Erie and improvement of access

D: MULTIPLE RESOURCE MANAGEMENT, ZONE I

Character
The Haldimand Clay Plain physiographic region defines this resource management area. Bedrock lies in close proximity to the surface clay soil. Drainage is provided by the major watercourses of Nanticoke, Black, Sandusk, and McKenzie Creeks. Corn and other grain production and dairy operations predominate. Urban development consists of many small scattered hamlets. The Nanticoke Industrial Complex (Stelco, Texaco, Hydro) has initiated a re-alignment of economic production from agriculture to industrial. A corresponding shift to urban settlement is evident in the creation of the new townsite of Townsend.

Resource Management Guidelines
The Ministry wishes to encourage land uses which promote and complement access to and effective utilization of resources. The predominance of mixed farming activity in this area has determined a low level of natural resource factors. Forested areas occur as small scattered woodlots, wildlife habitat is limited and there are few life science features. There is, however, a potential for this zone to produce high quality forest products, big game (deer) and mineral aggregate (crushable stone).
Natural resource management effort will be directed towards:
- forestry - existing productive forest and reforestation of idle lands
- mineral aggregate - existing licenced stone operations and encouraging municipal recognition of high priority aggregate deposits (stone)
- wildlife - maintenance of existing habitat and development of new habitat
- parks - encouraging the protection of the significant earth science features

E: MULTIPLE RESOURCE MANAGEMENT, ZONE II

Character
The physiographic region of southern Ontario known as th
resource management area. The gently rolling topograph
valleys, is covered with a light sandy soil.
Tobacco and fruit (strawberries, apples) are important agri
mixed farming operations are also important land uses of th
Urban settlement consists of small hamlets and scattered k

Resource Management Guidelines
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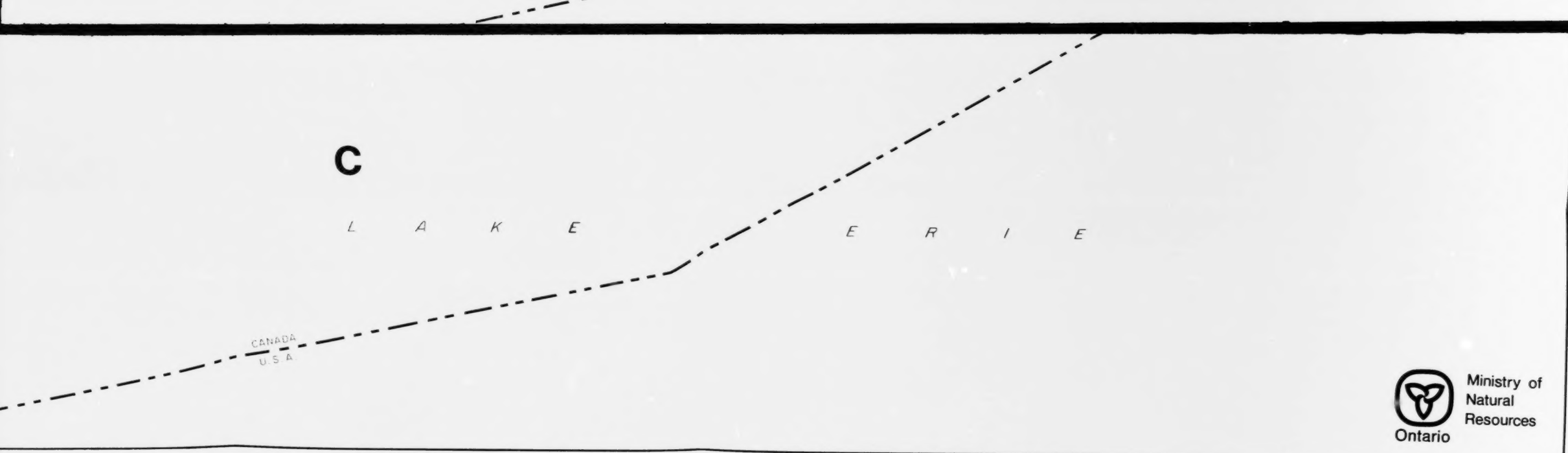
- mineral aggregate - existing licenced sand and gravel op
- fossil fuels - exploration and production of natural gas and
- sport fisheries - cold water stream rehabilitation and
ponds and reservoirs
- wildlife - maintenance of exiting habitat
- parks - encouraging the protection of the significant life sc



Ministry of Natural Resources
Ontario

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Natural resource management effort will be directed towards:
- forestry - existing productive forest and reforestation of idle lands
- mineral aggregate - existing licenced stone operations and encouraging municipal recognition of high priority aggregate deposits (stone)
- wildlife - maintenance of existing habitat and development of new habitat
- parks - encouraging the protection of the significant earth science features

E: MULTIPLE RESOURCE MANAGEMENT, ZONE II

Character
The physiographic region of southern Ontario known as the Norfolk Sand Plain defines this resource management area. The gently rolling topography, dissected by numerous river valleys, is covered with a light sandy soil.
Tobacco and fruit (strawberries, apples) are important agricultural commodities. Dairy and mixed farming operations are also important land uses of the area.
Urban settlement consists of small hamlets and scattered key urban centres.

Resource Management Guidelines
The Ministry wishes to encourage land uses which promote and complement resource access and effective utilization. Agricultural land uses will be recognized as significant economic factors. Natural resource use will be undertaken either concurrently or sequentially.
Management of natural resources will be directed principally towards the following programs:
- forestry - existing productive forest and reforestation of idle lands
- mineral aggregate - existing licenced sand and gravel operations
- fossil fuels - exploration and production of natural gas and oil
- sport fisheries - cold water stream rehabilitation and management, and maintaining ponds and reservoirs
- wildlife - maintenance of exiting habitat
- parks - encouraging the protection of the significant life science features